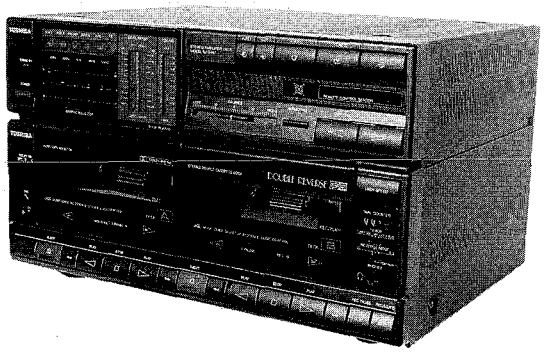
SERVICE DATA
FILE NO. 170-298

TOSHIBA

STEREO AMPLIFIER DECK

SJ-3447



SPECIFICATION

Amplifer

Rated output power:	50 watts per channel, 10% THD, at 8 ohms, 1 kHz
Total harmonic distortion:	0.04% at half rated output power, 1 kHz
Input terminals:	MIC (Mono, 6.3 mm diameter), CD, PHONO' AUX 1, AUX 2
Output terminals:	Headphone speakers, surround speakers, turntable power source
Input/Output terminal:	Tuner, CD
Graphic equalizer:	63 Hz, 250 Hz, 1 kHz, 4kHz, 12 kHz
Signal-to-noise ratio:	Phono: 72 dB CD: 90 dB

Cassette Deck

Track system:	4-track, 2-channel stereo
Recording system:	AC bias
Heads:	Deck A: Pb: 1 Deck B: Rec/pb: 1 Erase: 1
Wow and flutter:	0.07% (WRMS)
Frequency response:	40 – 16,000 Hz
Signal-to-noise ratio:	Dolby B 65 dB Dolby C 75 dB
Motors:	Capsten motor (electronically controlled DC type): 2 Reel motor (DC motor): 2

General

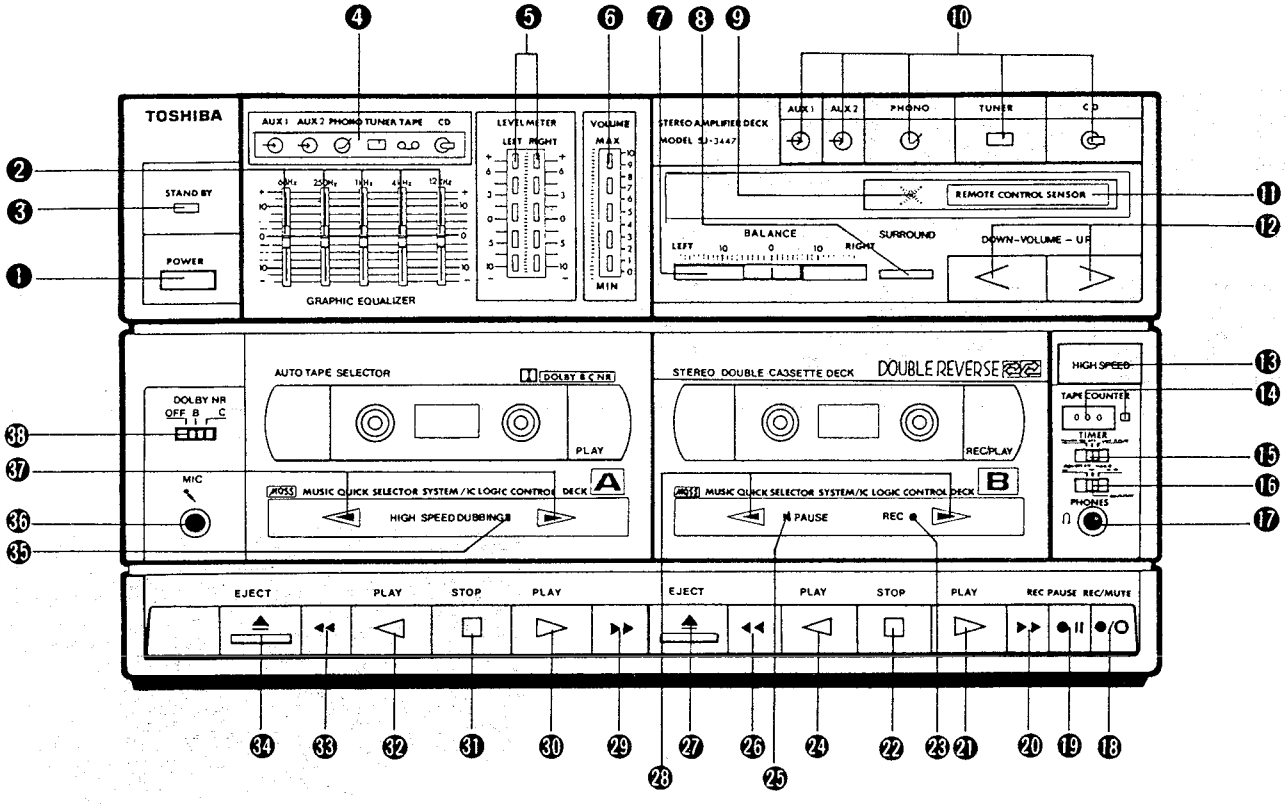
Power supply:	AC 220V ∿, 50 Hz
Power consumption:	160 watts
Dimensions:	340(W) x 209(H) x 250(D) mm
Weight:	7.1 kg

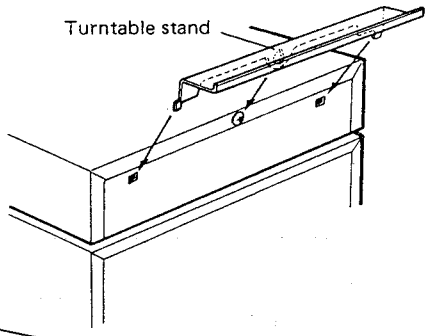
Specifications are subject to change without notice.

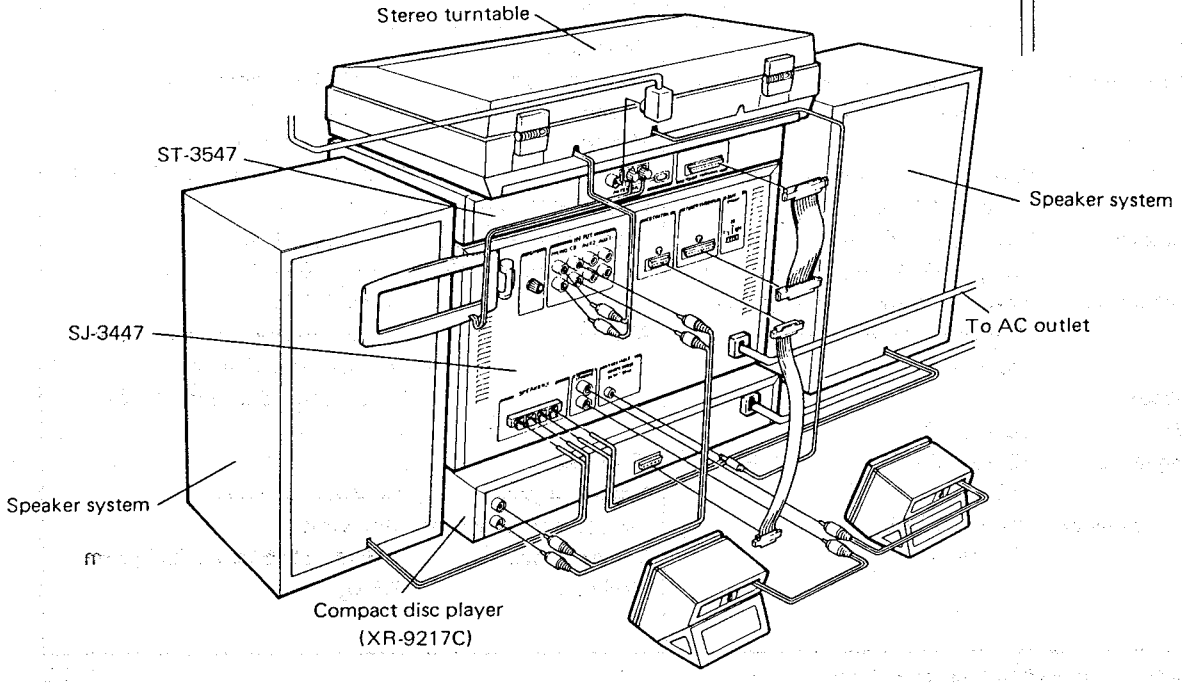
TD

PRINTED IN JAPAN 22905834 July, 1988 Ⓢ

OPERATING CONTROLS







❶ **POWER Switch**
Note: In the STAND BY position, the unit remains connected to the main power supply. Therefore, disconnect the power cord when the unit is not going to be used for a long time.

❷ **GRAPHIC EQUALIZER Level Controls**

❸ **Stand by Indicator**

❹ **Function Indicator**

❺ **LEVEL METER Indicator**

❻ **VOLUME Indicator**

❼ **BALANCE Control**

❽ **SURROUND Switch**
When this switch is turned on, an emphasized wide stereo sound effect is produced even without connecting the surround speaker system.

❾ **SURROUND Indicator**

❿ **Function Selector Buttons**

⓫ **REMOTE CONTROL SENSOR**

⓬ **Volume Control (DOWN-VOLUME-UP)**

⓭ **HIGH SPEED Dubbing Button**

⓮ **TAPE COUNTER and Reset Button**

⓯ **TIMER Switch**

⓰ **REVERSE MODE Switch**

⓱ **PHONES Jack**

⓲ **REC/MUTE Button**

⓳ **REC PAUSE Button**

⓴ **Fast Forward Button (▶▶)**

㉑ **PLAY Button (▶)**

㉒ **STOP Button**

㉓ **REC Indicator**

㉔ **PLAY Button (◀)**

㉕ **PAUSE Indicator**

㉖ **Fast Rewind Button (◀◀)**

㉗ **EJECT Button**

㉘ **Tape Running Direction Indicators**

㉙ **Fast Forward Button (▶▶)**

㉚ **PLAY Button (▶)**

㉛ **STOP Button**

㉜ **PLAY Button (◀)**

㉝ **Fast Rewind Button (◀◀)**

㉞ **EJECT Button**

㉟ **HIGH SPEED DUBBING Indicator**

㊱ **MIC Jack**

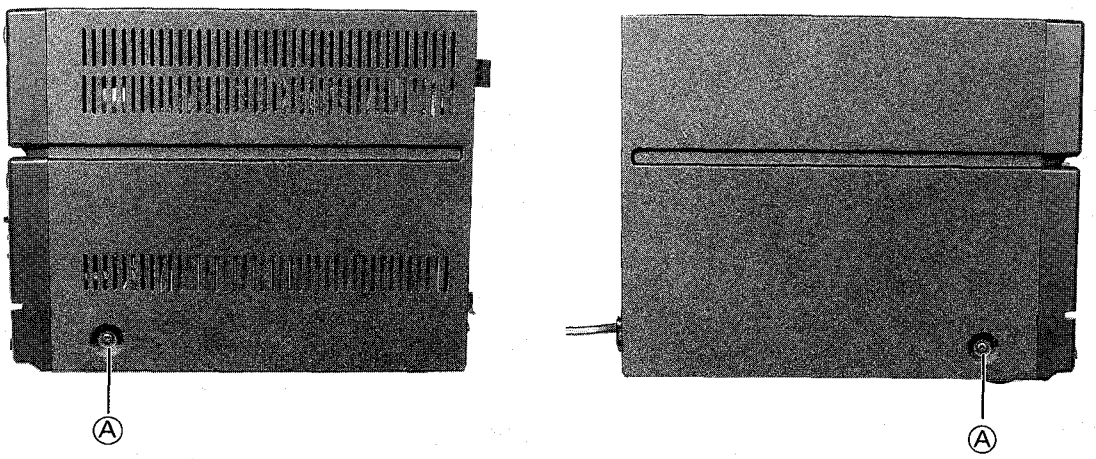
㊲ **Tape Running Direction Indicators**

㊳ **DOLBY NR* Switch**
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

DISASSEMBLY INSTRUCTIONS

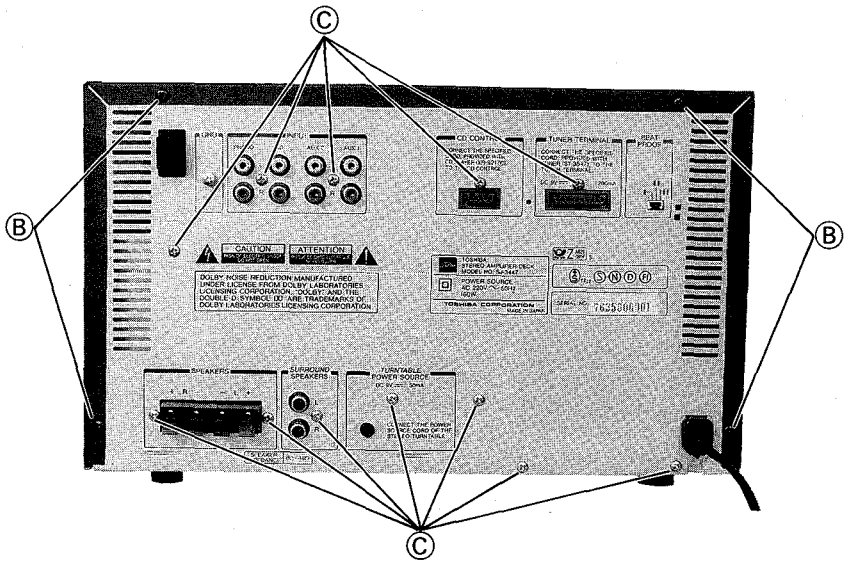
REMOVAL OF TOP COVER

Unscrew two screws Ⓐ on both sides, and also unscrew four screws Ⓑ on rear side. Now, top cover can be removed.



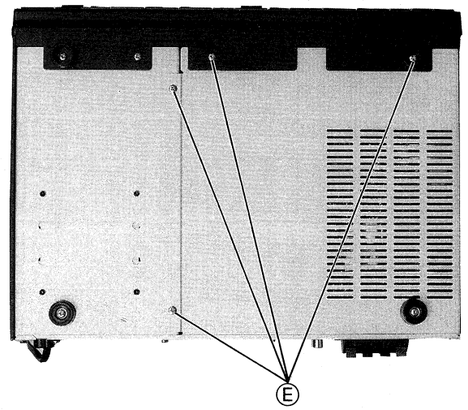
REMOVAL OF REAR PANEL

1. Remove top cover.
2. Unscrew tweble screws Ⓒ on rear panel, then rear panel can be removed.



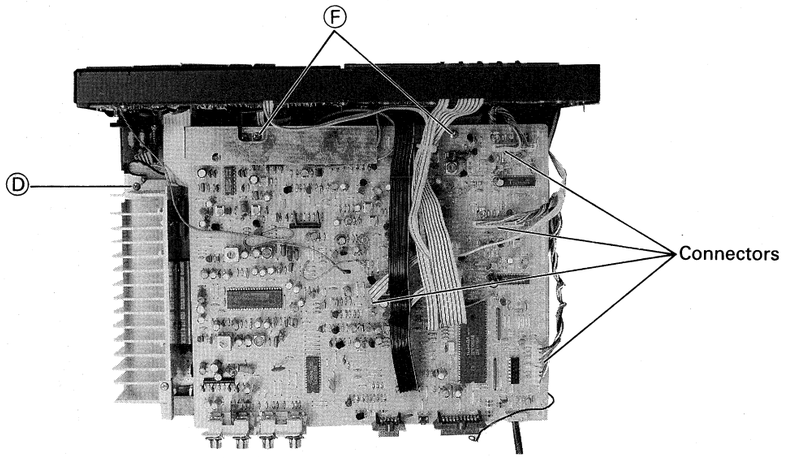
REMOVAL OF BOTTOM PLATE

Unscrew one screw Ⓓ that is fixing heatsink plate, and unscrew four screws Ⓔ on bottom plate. Than bottom plate can be removed and power P.C. board can be checked.



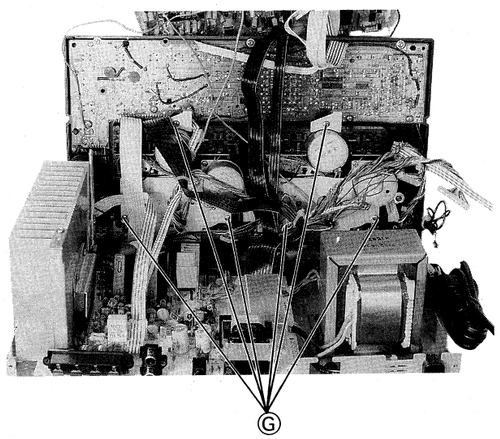
REMOVAL OF MAIN P.C. BOARD

1. Remove top cove.
2. Remove rear panel.
3. Unscrew two screws Ⓕ as shown on Figure.
4. Disconnect four connectors, now main P.C. board can be removed.

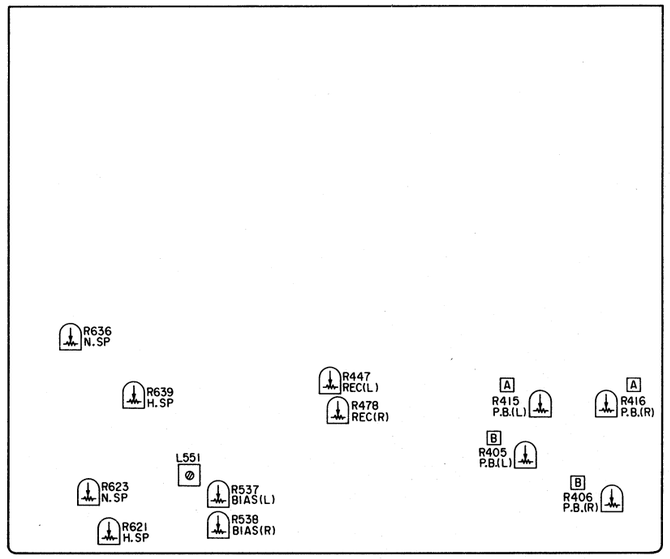


REMOVAL OF MECHANISM ASS'Y

1. Remove top cover.
2. Remove rear panel.
3. Remove main P.C. board.
4. Unscrew six screws Ⓖ , both left and right mechanism Assemblies can be removed.



ADJUSTMENTS



No.	Item	Adjustment Point	Adjustment Value	Adjustment Procedure
1	Tape Speed	R621, R639 R623, R636	6000 ±60 Hz (Double Speed) 3000 ±30 Hz (Standard Speed)	After playing back ATT-111, short TP-H.S, GND and adjust for 6000 Hz with R621 (R639). Then remove the short and adjust for 3000 Hz with R623 (R636).
2	Azimuth	Head Azimuth Screw	Peak Phase Dif.: 0 ±90 Degrees	Play back ATT-255C and adjust head screw so that 10 kHz will become flat against 315 Hz. (FWD is for right channel and REV is for left channel.)
3	Playback Sensitivity	R405, R406 R415, R416	245 ±5 (mV)	Connect voltmeters to TP-L and TP-R, play back ATT-150 by Deck-B (DOLBY OFF) and adjust R405 and R406. Next, play back ATT-150 by Deck-A and adjust R415 and R416. Be sure to start with Deck-B.
4	Bias Frequency	L551	105 ±0.5 kHz	Load chrome tape on Deck-B and set to Record mode. Connect Frequency Counter to TP-BIAS and adjust for 105 kHz with L551.
5	Recording/ Playback Freq. Characteristics	R537, R538	0 ±0.5 dB	Set frequency to 333 Hz/12.5 kHz with 250 mV input to AUX1. Adjust R537 and R538 so that 12.5 kHz become flat at 333 Hz for TP-L and TP-R.
6	Recording/ Playback Sensitivity	R477, R478	0 ±0.5 dB	Set the level to 0 dB with 250 mV input to AUX1. Adjust R477 and R478 so that the level obtains 0 dB for TP-L and TP-R with chrome tape recorded and played back.

Note: NR switch is set at OFF position.

ELECTRICAL PARTS LOCATIONS

Q301

1	7.9V
2	-0.2V
3	0.1V
4	0.1V
5	-7.7V
6	0.1V
7	0.1V
8	-0.2V
9	7.9V

Q302

1	-8.9V
2	0V
3	0V
4	0V
5	0V
6	0V
7	0V
8	0V
9	0V
10	0V
11	3.5V
12	0V
13	0.2V
14	0V
15	0V
16	0V
17	0V
18	0.7V
19	0V
20	0V
21	0V
22	0V
23	0V
24	0V
25	0V
26	0V
27	0V
28	9.0V

Q305/306

E	0V
C	0V
B	0V

Q307/308

S	1.0V
G	0V
D	9.0V

Q309/310

S	-7.9V
G	-8.9V
D	0.9V

Q311/312

E	0V
C	0V
B	0V

Q303/304

	PLAY OR HIGH SPEED	OTHERS
E	0V	0V
C	0V	0V
B	0V	0.7V

Q425/426

	HIGH SPEED	OTHERS
E	0V	0V
C	0.1V	0V
B	0.3V	0.6V

Q427/428

	B NORMAL	OTHERS
E	0V	0V
C	0V	0V
B	0V	0.7V

Q429/430

	REC	OTHERS
S	0.2V	0V
G	-3.6V	-6.6V
D	0.2V	0V

Q431/432

	REC	REC MUTE	OTHERS
S	2.2V	0V	0V
G	21.0V	-0.1V	0.3V
D	2.2V	0V	0V

Q433/434

	REC	OTHERS
S	0.2V	0V
G	-20.2V	0.2V
D	2.2V	0V

Q435/436

	REC, B REC	OTHERS
S	0V	0V
G	0.5V	-8.8V
D	0V	0V

Q437

	REC	OTHERS
E	4.3V	0.5V
C	4.3V	-8.0V
B	3.7V	0V

Q439

	REC,REC MUTE	OTHERS
E	0V	6.2V
C	-8.6V	6.2V
B	0V	5.6V

Q440

	REC,REC MUTE	OTHERS
E	0V	0V
C	0V	6.3V
B	0.6V	0V

Q441

	HIGH SPEED	OTHERS
E	0.46V	2.6V
C	-8.3V	2.6V
B	0V	2.0V

Q551

	REC	OTHERS
E	0.2V	0V
C	7.3V	9.1V
B	0.9V	0V

Q552

	B CHROME	B NORMAL
E	9.1V	9.1V
C	9.1V	9.1V
B	8.4V	8.6V

Q553

	B CrO_2	B NORMAL
E	0V	0V
C	0V	8.6V
B	0.7V	0V

Q403

1		7.7V
2		2.3V
3	A PLAY OR B REC	1.6V
	OTHERS	0.1V
4		2.1V
5		2.1V
6		2.1V
7		2.1V
8		0V
9		2.1V
10		2.3V
11		2.1V
12		2.1V
13		2.1V
14		2.1V
15	NORMAL	0.3V
	CrO_2	4.5V
16		2.2V

Q411

1	C	0V
	OTHERS	9.0V
2	OFF	6.4V
	OTHERS	0.1V
3		4.6V
4		9.0V
5		4.6V
6		4.6V
7		4.6V
8		4.6V
9		5.0V
10		4.6V
11		4.8V
12		4.8V
13		0.2V
14		0.2V
15		4.6V
16		0.2V
17		0.3V
18		4.6V
19		4.8V
20		4.8V
21		4.8V
22		4.8V
23		4.8V
24		4.8V
25		4.6V
26		0.2V
27		0.3V
28		4.6V
29		0.2V
30		0.3V
31		4.8V
32		4.8V
33		4.6V
34		4.9V
35		4.6V
36		4.6V
37		4.6V
38		4.6V
39		0V
40		4.6V
41		1.3V
42	REC	0V
	OTHERS	9.0V

Deck P.C.Board

To Power P.C.Board Ⓐ,Ⓑ

To Front P.C.Board Ⓒ,Ⓓ,Ⓔ

Motor

Motor

Motor

Motor

Play Head

REC/Play Head

Q401/402

	HIGH SPEED	OTHERS
S	2.1V	2.1V
G	-8.5V	2.5V
D	0.3V	2.1V

Q404

	REC	OTHERS
E	0.1V	3.8V
C	-8.8V	3.4V
B	0V	3.2V

Q405/406

	REC	OTHERS
S	0V	0V
G	4.6V	-8.8V
D	0V	0V

Q407/408

	TAPE PLAY	OTHERS
E	0V	0V
C	0V	0V
B	-0.6V	0.7V

Q413/414

E	0.7V
C	5.3V
B	1.3V

Q416

E	0V
C	9.0V
B	0V

Q409/410

	B or C	OFF
E	0V	0.1V
C	0V	0V
B	0.6V	0.1V

Q415

	REC	OTHERS
E	0V	0V
C	0V	0V
B	0.1V	0.61V

Q417/418

	HIGH SPEED	OTHERS
E	0V	0V
C	0V	0V
B	0.7V	0V

Q419/420

	REC	OTHERS
E	0V	0V
C	0V	0V
B	0V	0.7V

Q421

	REC	HIGH SPEED	OTHERS
E	0.1V	4.7V	2.0V
C	0V	0V	2.0V
B	0.1V	5.7V	1.4V

Q422

	HIGH SPEED	OTHERS
E	0V	0V
C	0V	0.1V
B	0.3V	0.7V

Q423/622

1	9.0V
2	0.1V
3	0.1V
4	0.1V
5	-8.9V
6	0.1V
7	0.1V
8	0V
9	9.0V

Q554

	REC Ⅱ	REC Ⅰ or Ⅲ	OTHERS
E	0V	0V	0V
C	0V	18.3V	0V
B	0V	0.7V	0V

Q555

	REC Ⅰ or Ⅱ	REC Ⅲ	OTHERS
E	0V	0V	0V
C	23.9V	1.4V	0V
B	0.1V	1.8V	0V

SCHEMATIC DIAGRAM

Q603

1		4.9V
2		4.9V
3	REC HIGH SPEED	0.1V
	OTHERS	0V
4		5.5V
5	A PLAY	0.1V
	OTHERS	5.0V
6		0V
7	WITH A TAPE	0V
	WITHOUT A TAPE	5.5V
8	WITH B TAPE	0V
	WITHOUT B TAPE	5.5V
9	WITH SIDE B TAB	0V
	OTHERS	5.5V
10	WITH SIDE A TAB	0V
	OTHERS	5.5V
11		1.1V
12	A MQS	1.9V
	OTHERS	0.1V
13	A FORWARD	1.6V
	A REVERSE	0.1V
14	A FORWARD	0.1V
	A REVERSE	1.6V
15		0.1V
16	B MQS	2.4V
	OTHERS	0.1V
17	B FORWARD	1.9V
	B REVERSE	0.1V
18	B FORWARD	0.1V
	B REVERSE	2.0V
19	A PLAY	4.3V
	OTHERS	0.1V
20		0.1V
21	A ◁ ◁◁	4.6V
	OTHERS	0.1V
22	A ▷ ▷▷	4.6V
	OTHERS	0.1V
23	※	4.3V
	OTHERS	0.1V
24		0.1V
25	B ◁ ◁◁	4.6V
	OTHERS	0.1V
26	B ▷ ▷▷	4.6V
	OTHERS	0.1V
27	REC, REC PAUSE	0.2V
	OTHERS	5.4V
28	REC PAUSE	0.2V
	OTHERS	4.6V

Q603-2

29	AUX 2	0.4V
	OTHERS	1.4V
30	AUX 1	0.4V
	OTHERS	1.5V
31	0V	
32	0V	
33	CD FUNCTION	0.3V
	OTHERS	1.5V
34	TAPE FUNCTION	0.3V
	OTHERS	1.6V
35	TUNER FUNCTION	0.4V
	OTHERS	5.4V
36	PHONO FUNCTION	0.4V
	OTHERS	2.5V
37	HIGH SPEED	0.2V
	OTHERS	4.9V
38	REC	5.1V
	OTHERS	0.1V
39	REC	0.1V
	HIGH SPEED	4.7V
	OTHERS	2.0V
40	TAPE PLAY	0.1V
	OTHERS	2.6V
41		0.1V
42		5.0V
43	※※	4.4V
	OTHERS	0.1V
44	A PLAY	4.3V
	OTHERS	0.1V
45		5.4V
46		5.4V
47		5.4V
48		5.4V
49		4.9V
50		2.2V
51		2.3V
52		4.9V
53		4.9V
54		0.1V
55		0V
56		0.1V
57		5.5V
58		5.5V
59		0V
60		4.9V
61		0V
62		0V
63		0V
64		4.9V

※B PLAY, REC
REC PAUSE
HIGH SPEED

※※REC, REC PAUSE
HIGH SPEED

Q610/611

1		3.4V
2		0.1V
3	▷ ▷▷	4.6V
	OTHERS	0.1V
4	◁ ◁◁	4.6V
	OTHERS	0.1V
5		0.1V
6	PLAY	4.2V
	OTHERS	0.1V
7	PLAY	0.9V
	OTHERS	9.1V
8	PLAY	6.9V
	OTHERS	9.1V
9	STOP	9.0V
	OTHERS	0.8V
10		0V
11		0.1V
12	◁	3.9V
	◁◁	8.2V
	OTHERS	0.7V
13	PLAY, FF, REW	0.8V
	OTHERS	0.3V
14	▷	3.9V
	▷▷	8.2V
	OTHERS	0.2V
15		0V
16		9.1V
17		9.1V
18		3.3V
19		3.4V
20		0.1V
21		3.3V
22		0V
23		3.3V
24		4.5V

Q612

1		0V
2	B FORWARD	0.1V
	B REVERSE	1.9V
3	B FORWARD	1.9V
	B REVERSE	0.1V
4	B MQS	1.9V
	OTHERS	0.1V
5	A FORWARD	0.1V
	A REVERSE	1.6V
6	A FORWARD	1.6V
	A REVERSE	0.1V
7	A MQS	1.9V
	OTHERS	0.1V
8		0V
9		0V
10	A MQS	0.1V
	A PLAY	0.9V
	OTHERS	9.1V
11	A FORWARD	0.1V
	A REVERSE	4.1V
12	A FORWARD	4.1V
	A REVERSE	0.1V
	B MQS	0.1V
13	B PLAY	0.9V
	OTHERS	9.0V
14	B FORWARD	0.1V
	B REVERSE	4.2V
15	B FORWARD	4.2V
	B REVERSE	0.1V
16		5.5V

Q604

	A PLAY, FF, REW	OTHERS
E	8.4V	0.7V
C	8.4V	0.7V
B	7.8V	0.3V

Q605

	A PLAY, FF, REW	OTHERS
E	9.1V	9.1V
C	9.0V	0.8V
B	8.3V	8.6V

Q606

	HIGH SPEED	OTHERS
E	0V	0V
C	8.9V	0V
B	0.1V	0V

Q607

	HIGH SPEED	B PLAY, REC	OTHERS
E	6.2V	8.5V	0.8V
C	8.4V	8.5V	0.8V
B	7.9V	7.8V	0.3V

Q608

	A PLAY, FF, REW	OTHERS
E	9.0V	9.0V
C	9.0V	0.8V
B	8.2V	8.6V

Q609

	HIGH SPEED	OTHERS
E	0.1V	0V
C	0.1V	0.7V
B	0V	0V

Q613

	HIGH SPEED	OTHERS
E	0V	5.3V
C	5.0V	0.1V
B	4.3V	5.0V

Q614

	HIGH SPEED	OTHERS
E	0.1V	0V
C	0.2V	4.3V
B	0.8V	0V

Q615

	REC	OTHERS
E	5.0V	0V
C	5.5V	5.5V
B	5.1V	0.1V

Q616

	TUNER	OTHERS
E	5.5V	5.5V
C	5.5V	0V
B	5.0V	5.5V

Q619

I	5.5V
G N D	0V
O	5.2V

Q620

E	0V
C	0.9V
B	0V

Q621

S	0V
G	8.6V
D	5.5V

Q623

E	0.1V
C	0V
B	0V

Q624

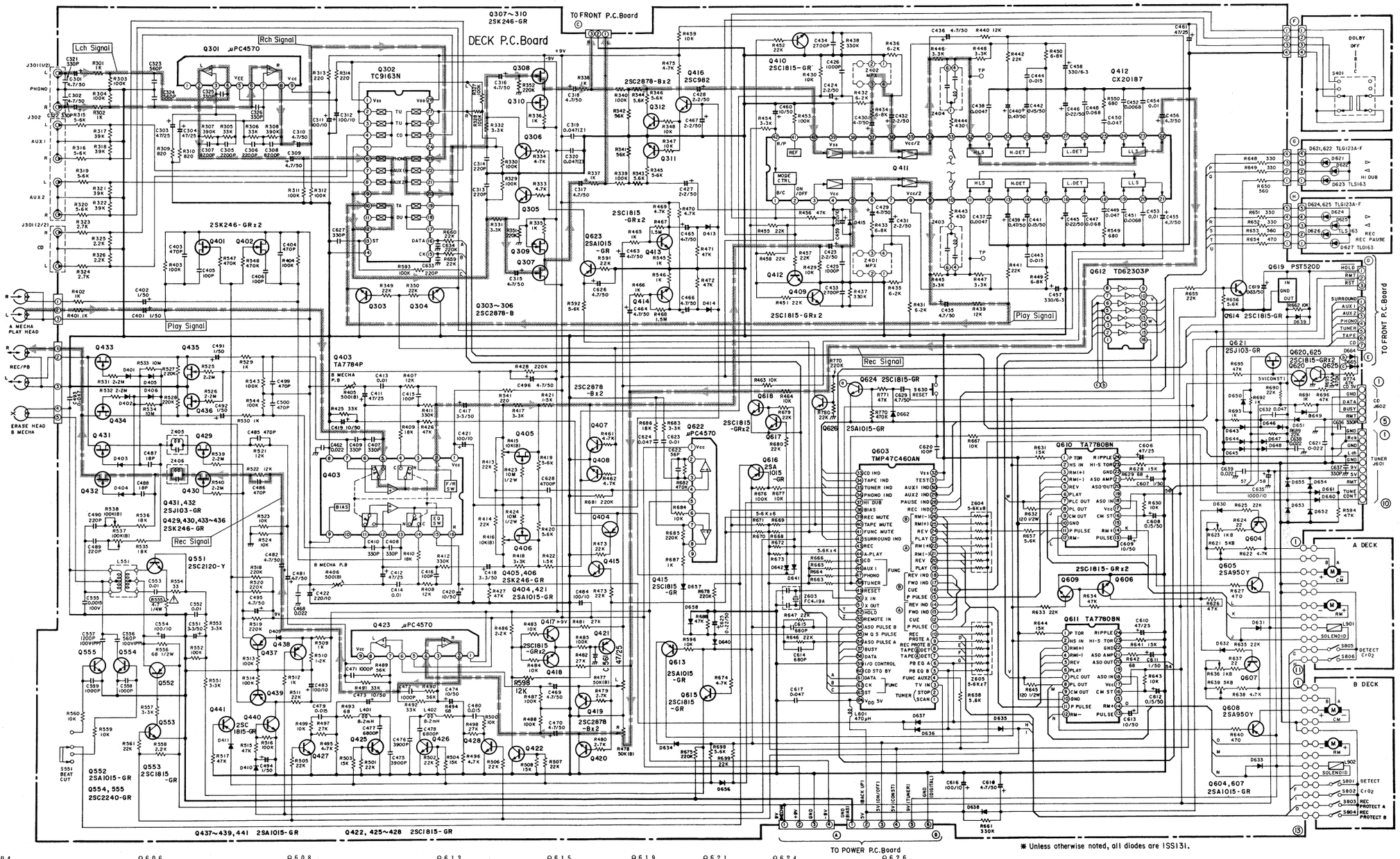
	HIGH SPEED	OTHERS
E	0.1V	0V
C	5.5V	5.5V
B	0.1V	0V

Q625

E	0V
C	0V
B	0.6V

Q626

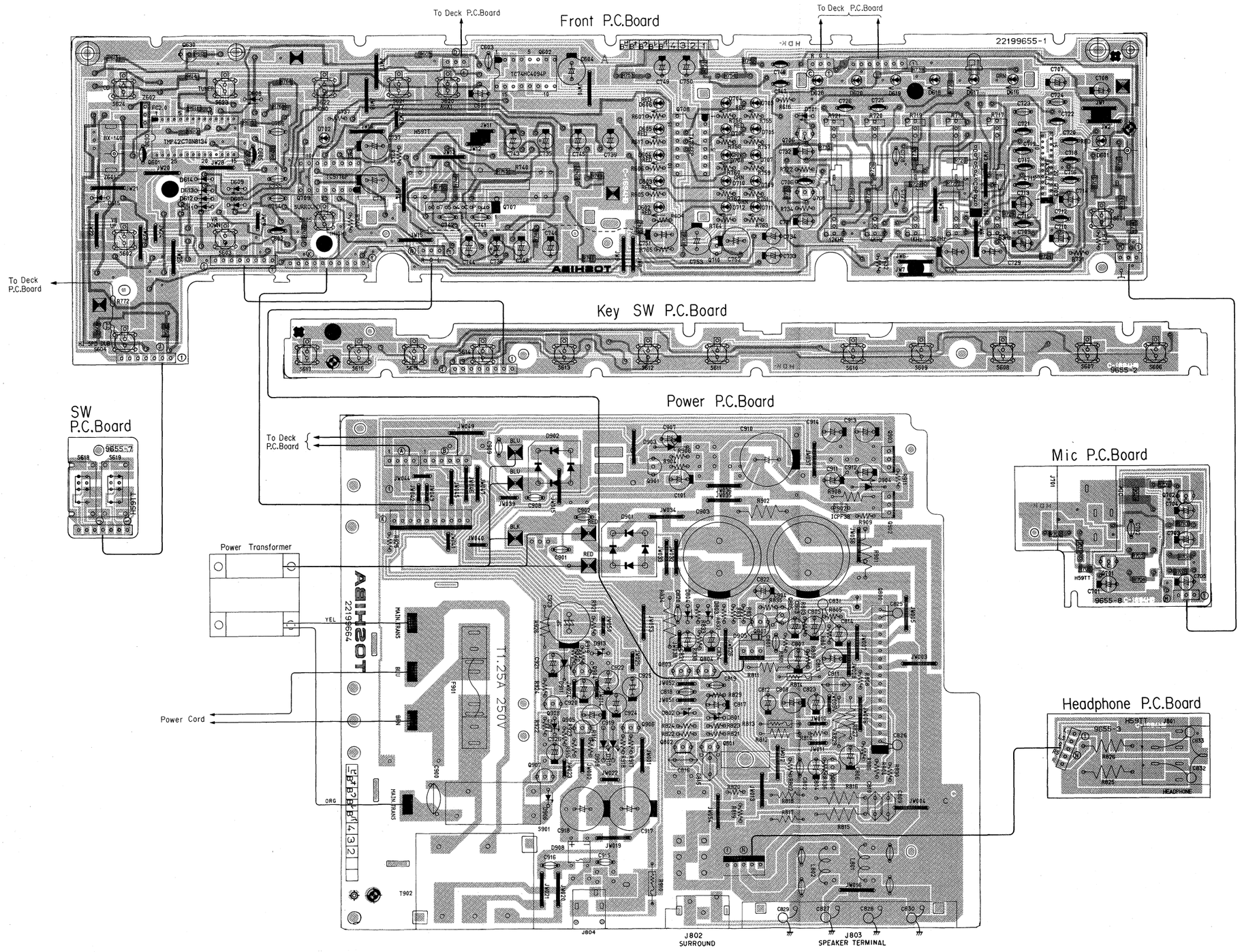
	PLAY	HIGH SPEED	OTHERS
E	0.1V	0.2V	0.3V
C	0V	0V	2.5V
B	0.8V	0.8V	1.9V



※ Unless otherwise noted, all diodes are 1SS131.

CAUTION:
The ⚠ mark, the Location No. circled with oval in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

ELECTRICAL PARTS LOCATIONS



PCB FRONT

Q601

	TUNER	CD/PLAY	TAPE/PLAY
1	1.9V	1.9V	1.9V
2	2.3V	2.3V	2.3V
3	4.9V	4.9V	4.9V
4	0V	0V	0V
5	0V	0V	0V
6	0V	0V	0V
7	0V	0V	0V
8	0V	0V	0V
9	5.3V	5.3V	5.3V
10	0V	0V	0V
11	4.7V	4.7V	4.7V
12	0V	0V	0V
13	0V	0V	0V
14	0V	0V	0V
15	4.9V	4.9V	4.9V
16	4.9V	4.9V	4.9V
17	4.9V	4.9V	4.9V
18	4.9V	4.9V	4.9V
19	4.9V	4.9V	4.9V
20	4.9V	4.9V	4.9V
21	4.9V	4.9V	4.9V
22	4.9V	4.9V	4.9V
23	4.9V	4.9V	4.9V
24	0V	0V	0V
25	0V	0V	0V
26	4.9V	4.7V	4.7V
27	4.9V	4.9V	4.9V
28	4.9V	4.9V	4.9V

Q602

	VR MIN	VR MAX
1	0V	0V
2	4.9V	4.9V
3	4.9V	4.9V
4	5.5V	0.1V
5	5.5V	0V
6	5.5V	0V
7	5.5V	0.1V
8	0V	0V
9	5.5V	0V
10	5.5V	0V
11	5.5V	0.2V
12	5.5V	0.2V
13	5.5V	0.2V
14	5.5V	0V
15	4.7V	4.7V
16	5.5V	5.5V

Q703

1	6.4V
2	6.4V
3	7.0V
4	7.0V
5	6.4V
6	6.4V
7	7.0V
8	7.0V
9	6.4V
10	6.4V
11	7.0V
12	7.0V
13	6.4V
14	6.4V
15	7.0V
16	7.0V
17	4.5V
18	2.8V
19	2.8V
20	4.5V
21	3.4V
22	3.4V
23	7.3V
24	0V

Q704

1	7.3V
2	0.1V
3	0.1V
4	0.1V
5	7.6V
6	0.1V
7	0.1V
8	0.1V
9	7.3V

Q

E	5.0V
C	0V
B	5.5V

Q705

	SURROUND OFF	SURROUND ON
S	0.1V	0.1V
G	-8.7V	0.5V
D	0.1V	0.1V

Q706

	SURROUND OFF	SURROUND ON
E	5.3V	4.8V
C	-8.8V	4.8V
B	4.9V	4.1V

Q

E	0V
C	4.9V
B	5.5V

Q707

1	7.8V
2	0V
3	0.1V
4	0.1V
5	-7.7V
6	0.1V
7	0.1V
8	0V
9	7.8V

Q708

	METER OFF	METER ON
1	1.4V	1.4V
2	1.5V	3.5V
3	7.8V	0.2V
4	7.8V	0.2V
5	7.6V	0.3V
6	7.6V	0.3V
7	7.6V	0.3V
8	8.7V	8.1V
9	0V	0V
10	7.6V	0.3V
11	7.6V	0.3V
12	7.6V	0.3V
13	7.8V	0.2V
14	7.8V	0.2V
15	1.5V	3.5V
16	1.4V	1.4V

Q709

1	-7.7V
2	0V
3	0V
4	0V
5	0V
6	0V
7	0V
8	0V
9	0V
10	0V
11	0V
12	0V
13	0V
14	0V
15	0V
16	7.8V

Q710

E	9.0V
C	9.2V
B	9.2V

Q800

1	-0.1V
2	-0.1V
3	0V
4	-31.1V
5	-1.3V
6	+1.1V
7	-32.7V
8	-33.4V
9	-33.5V
10	0V
11	33.5V
12	32.3V
13	0V
14	-33.5V
15	-1.3V
16	0V
17	-0.1V
18	-0.1V

Q801

E	0V
C	-32.9V
B	0V

Q802

E	0V
C	-32.9V
B	0V

Q803

E	0V
C	-33.0V
B	0V

Q804

E	-33.0V
C	0V
B	-33.0V

Q805／806

E	0V
C	0V
B	0V

Q807

E	9.1V
C	0.1V
B	0.1V

Q901

E	5.5V
C	9.1V
B	6.1V

Q902

E	9.2V
C	13.3V
B	10.5V

Q903

E	9.2V
C	13.3V
B	10.4V

Q904

E	5.5V
C	9.9V
B	6.1V

Q905

E	9.0V
C	9.9V
B	9.6V

Q906

E	-8.8V
C	-10.7V
B	-9.5V

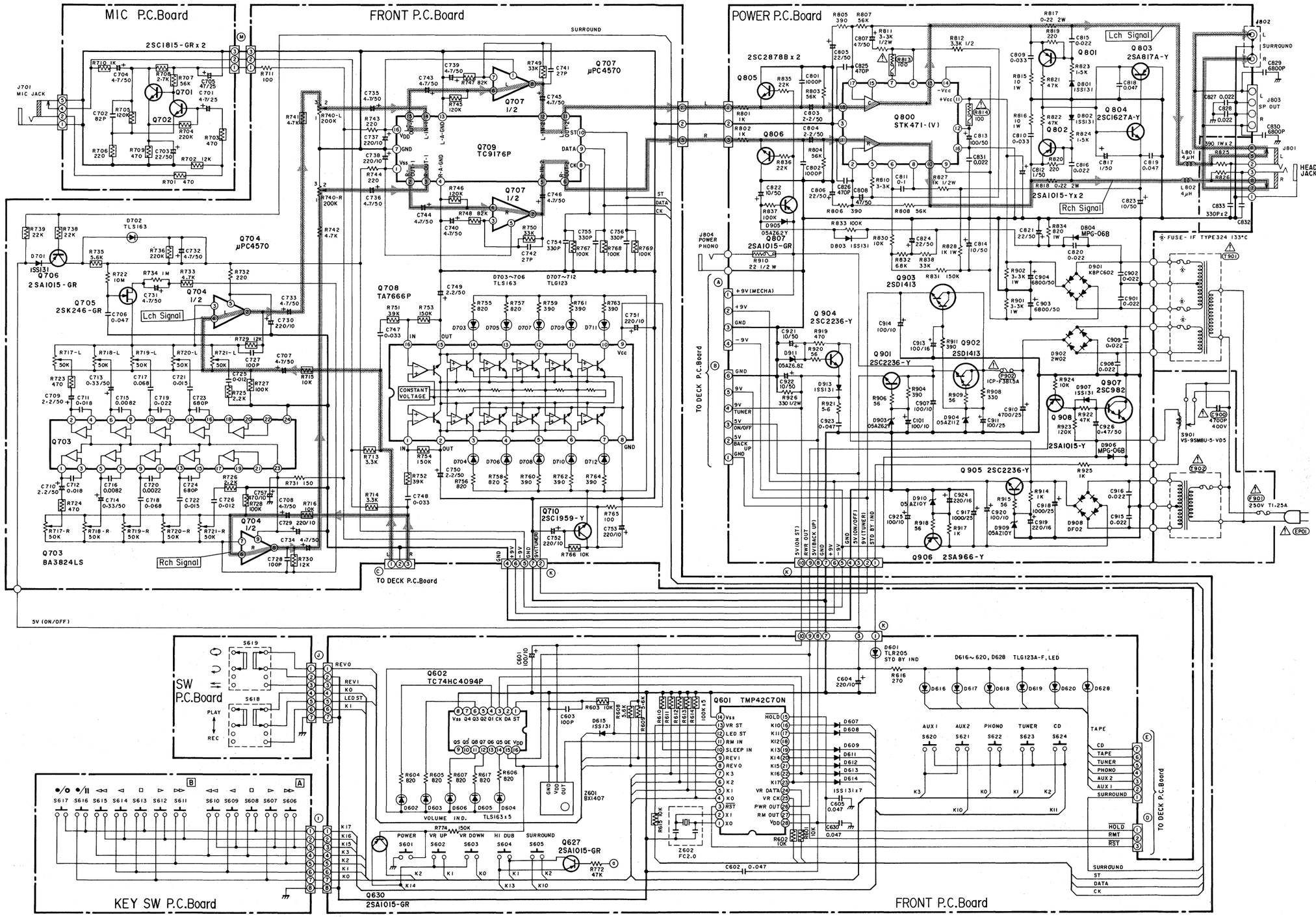
Q907

	POWER OFF	POWER ON
E	-7.9V	-0.7V
C	0V	0V
B	-8.8V	0.6V

Q908

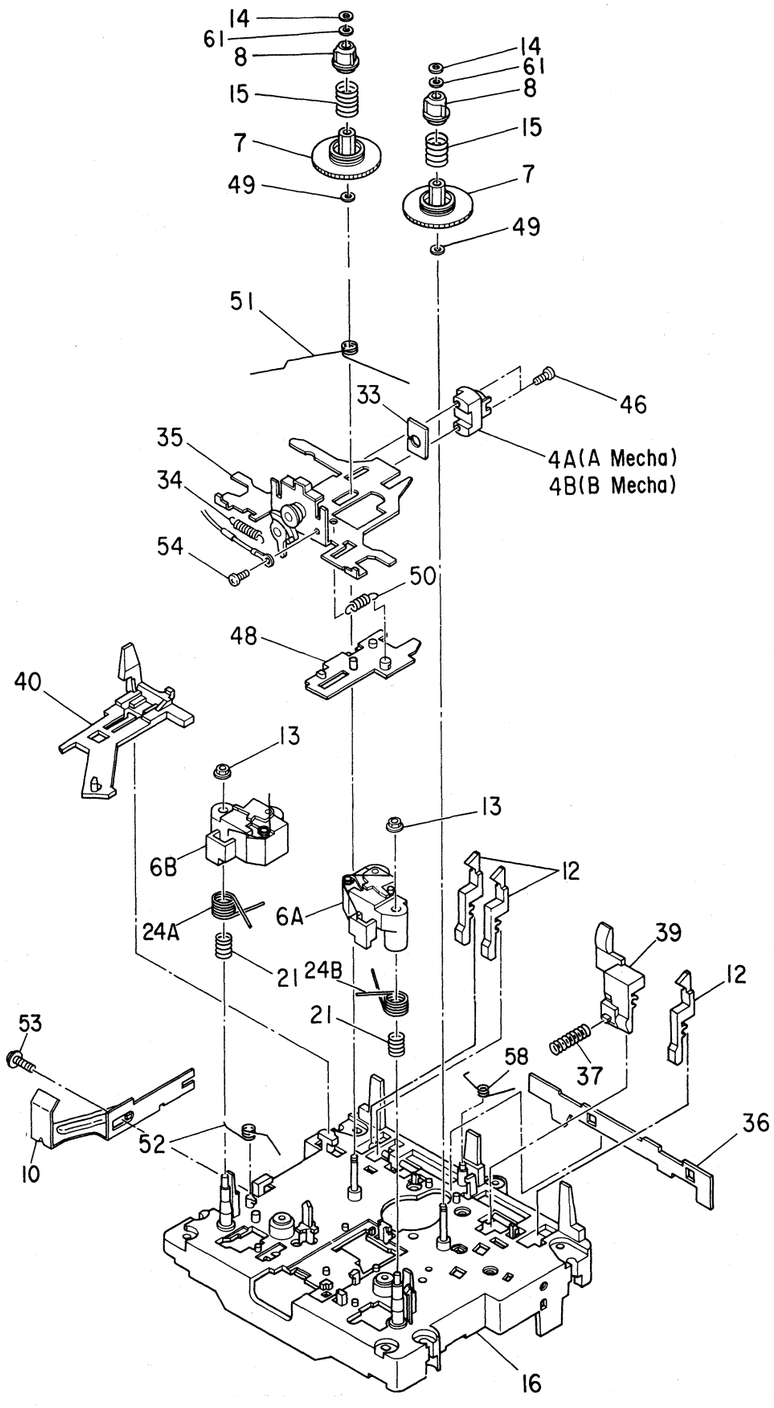
	POWER OFF	POWER ON
E	0V	4.7V
C	-8.8V	4.7V
B	0V	4.0V

SCHEMATIC DIAGRAM



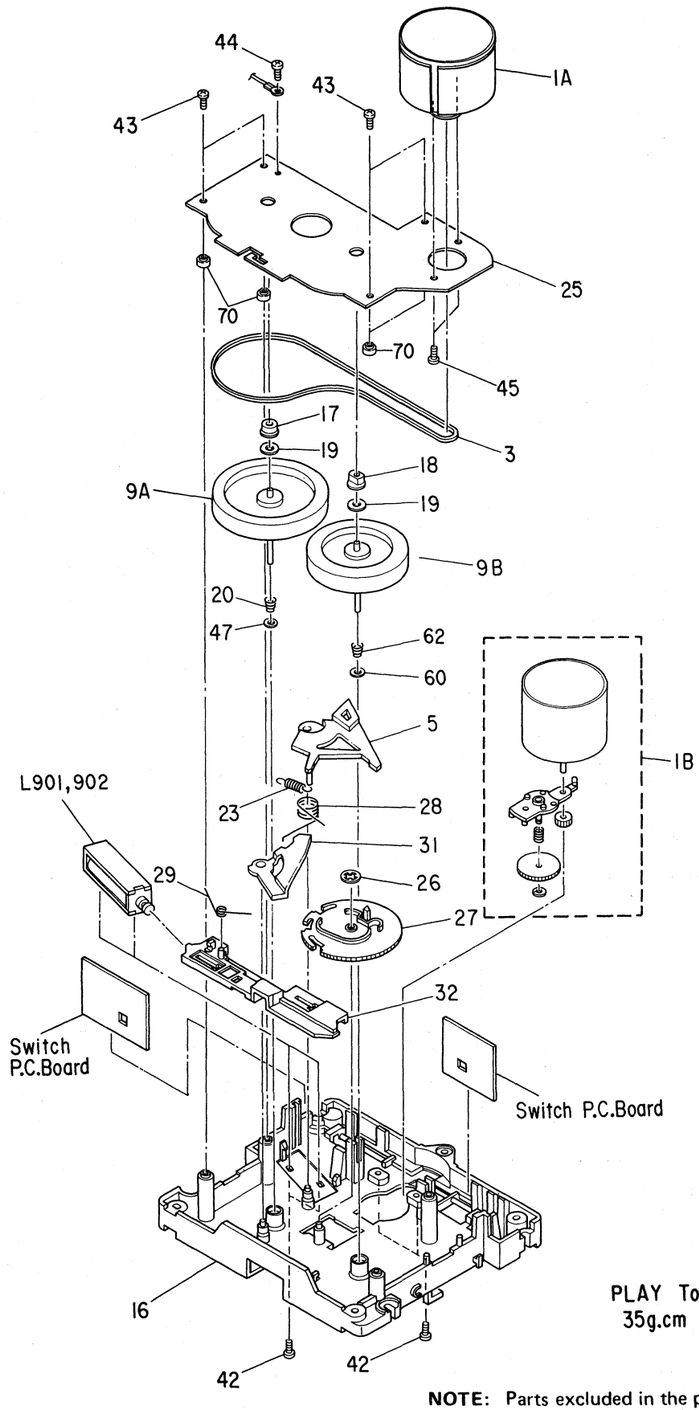
CAUTION:
The ⚠ mark, the Location No. circled with oval in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

MECHANISM EXPLODED VIEW (UPPER)



NOTE: Parts excluded in the parts list are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

MECHANISM EXPLODED VIEW (LOWER)

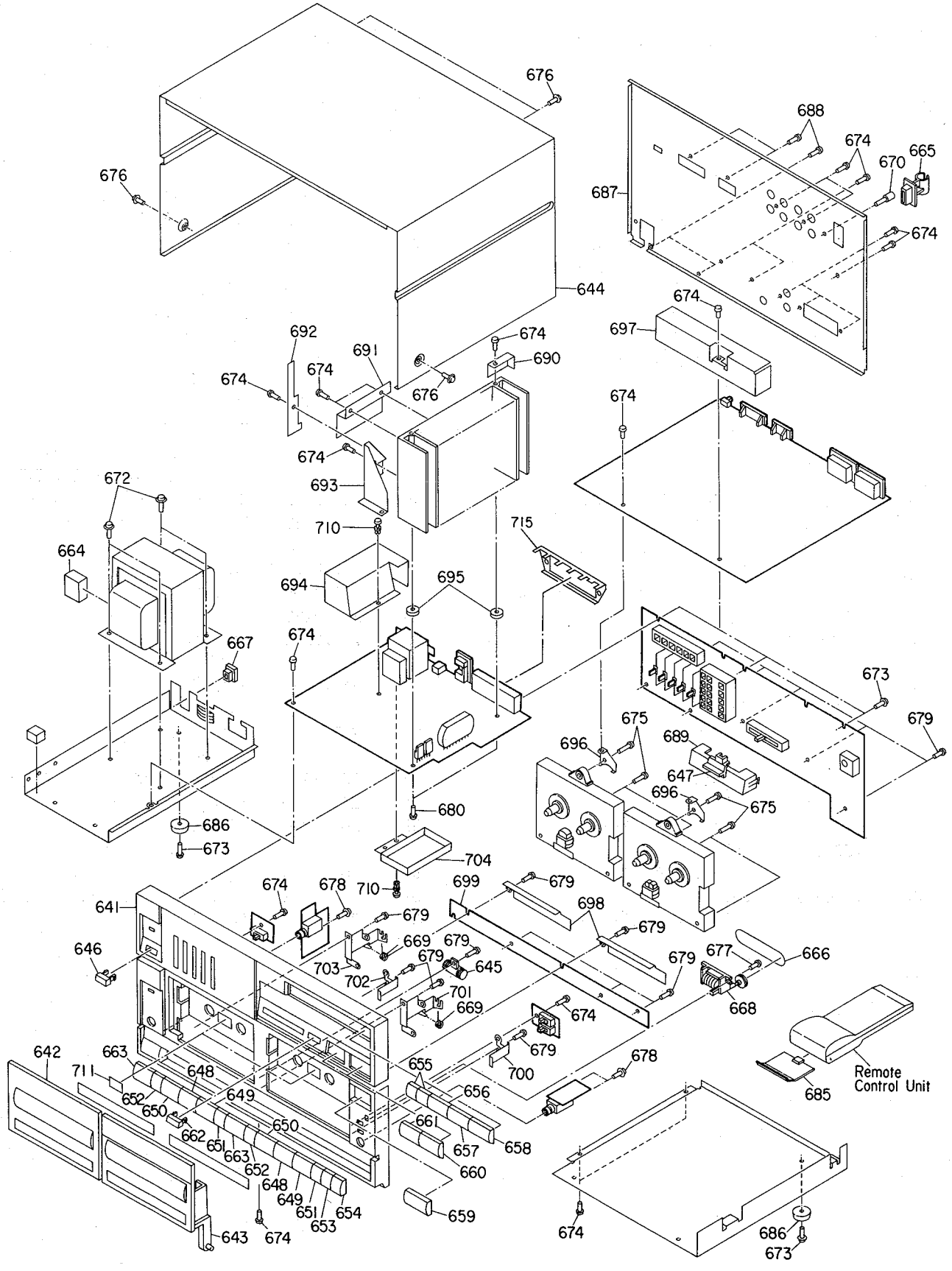


NOTE: Parts excluded in the parts list are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

MECHANISM PARTS LIST

Location No.	Part No.	Description
1A	25792049	MOTOR ASSY, MAIN
1B	25792050	MOTOR ASSY, REEL
3	25759122	BELT MAIN
4A	22217473	HEAD, RECORD/PLAYBACK
4B	22219013	HEAD, REC/PLAY/ERASE
5	25792057	LEVER ASSY, CAM LOCK
6A	25797107	ROLLER ASSY, PRESSURE
6B	25111063	PINCH LEVER KIT, L
7	25754505	REEL DRUM
8	25754436	COLLAR, REEL
9A	25797203	FLYWHEEL ASSY RIGHT
9B	25797204	FLYWHEEL ASSY LEFT
10	25749121	SLIDER SUB EJECT
12	25784369	LEVER, CASSETTE SWITCH
13	25783430	BUSHING
14	25766050	WASHER, 1.6X4.0X0.5MM, PO
15	25777506	SPRING
16	25792038	CHASSIS ASSY, MECHANISM
17	25725456	HOLDER, FLYWHEEL
18	25725486	HOLDER, FLYWHEEL
19	25766043	WASHER, 2.5MM
20	25777424	SPRING
21	25777520	SPRING SUPPORT
23	25776935	SPRING BACK LEVER
24A	25778492	SPRING PRESSURE,LEFT
24B	25778312	SPRING PRESSURE,RIGHT
27	25756539	GEAR MAIN CAM,LEFT
28	25778396	SPRING LOCK CAM
29	25778317	SPRING REVERSE
31	25784367	LEVER, REVERSE
32	25784393	SLIDER, REVERSE
33	25761538	CUSHION, HEAD
34	25776773	SPRING SHIFT
35	25797163	SLIDER ASSY, HEAD
36	25747261	LEVER, KICK-UP
37	25777507	SPRING HOLDER
39	25784452	LEVER, HOLDER
40	25784372	SLIDER, EJECT
42	22708532	SCREW, 2.6X6MM, Z, BID
43	22707786	SCREW, 2.6X12MM, Z, 12BID
44	22707350	SCREW, 2.6X5MM, Z, DTBID
45	22708528	SCREW, 2.6X3MM, Z, BID
46	22702173	SCREW, 1.4X6MM, B, PAN
47	25766175	WASHER
48	25784488	SLIDER, PLAY
49	25766223	WASHER, 2.1MM
50	25776914	SPRING ASSIST
51	25778309	SPRING RETURN
52	25778359	SPRING EJECT,C
53	22707361	SCREW, 2.6X8MM, Z, TPANW
54	22708523	SCREW, 2.0X3MM, Z, BID
58	25778360	SPRING KICK UP
60	25766323	WASHER
61	25766042	WASHER, 3.9X2.1X0.25MM, PO
62	25777577	SPRING

CABINET EXPLODED VIEW



NOTE: Parts excluded in the parts list are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CABINET PARTS LIST

Location No.	Part No.	Description
641	20836798	PANEL ASSY, FRONT
642	25887720	HOLDER ASSY, CASSETTE L
643	25887721	HOLDER ASSY, CASSETTE R
644	22882652	TOP COVER
645	25883722	DAMPER ASSY
646	20872730	KNOB POWER
647	20872731	KNOB BALANCE
648	20872732	KNOB STOP
649	20872733	KNOB PLAY
650	20872734	KNOB REV
651	20872735	KNOB FF
652	20872736	KNOB FR
653	20872737	KNOB REC
654	20872738	KNOB MUTE
655	20872739	KNOB AUX
656	20872740	KNOB PHONO
657	20872741	KNOB TUNER
658	20872742	KNOB CD
659	20872743	KNOB DUBBING
660	20872744	KNOB UP
661	20872745	KNOB DOWN
662	25888076	BUTTON CD-L
663	20872749	KNOB EJECT
665	22757138	HOLDER, ANTENNA
666	25755529	BELT, TAPE COUNTER
667	25844322	BUSH, CORD
668	25873665	TAPE COUNTER
669	25775337	SPRING EJECT
670	20794122	SCREW, GROUND
671	22703189	WASHER
672	22707610	SCREW, 4.0X6MM, B, FLFTBID
673	22707798	SCREW, 3.0X10MM, Z, 2DTPANW
674	22707842	SCREW, 3.0X8MM, Z, 2DTBID
675	22707843	SCREW, 3.0X16MM, R, 2DTBID
676	22708776	SCREW, 3.0X8MM, B, 2DTPANW
677	22707979	SCREW, 2.6X8MM, Z, 2DTBID
678	22708048	SCREW, 3.0X10MM, Z, TPAN
679	22707826	SCREW, 3.0X10MM, Z, DTBID
680	22707802	SCREW, 3.0X12MM, Z, 2DTBID
685	22882262	COVER, BATTERY RM-V347
686	20842681	FOOT
687	20836794	JACK PLATE
688	22708999	SCREW, 3.0X8MM, B, 2DTPAN
710	22705020	PLASTIC RIVET, 3.0X4.5MM

PARTS LIST

CAUTION:
The ⚠ mark, the Location No. circled with oval in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

ABBREVIATIONS

1. **CAPACITOR:** CD = Ceramic Disk, PF = Plastic Film, BL = Barrier Layer, EL = Electrolytic, MY = Mylar, PP = Polypropylene, PS = Polystyrene, TT = Tantalum, PE = Polyethylene
   MFD = Microfarad, PF = Picofarad, V = Voltage, NP = Non Polarity
2. **RESISTOR:** CF = Carbon Film, CC = Carbon Composition, OMF = Oxide Metal Film, MF = Metal Film
   K = Kilo (1000), M = Mega (1000000)
3. **TOLERANCE**

Symbol	F	G	J	K	M	N	Z	P
%	±1	±2	±5	±10	±20	±30	−20+80	0+100

Symbol	C	D
pF	±0.25	±0.5

IC/TRANSISTORS

Location No.	Part No.	Description
Q301	22128056	IC, UPC4570H
Q302	B0411630	IC, TC9163N
Q303	A6342210	TRANSISTOR, 2SC2878-B
Q304	A6342210	TRANSISTOR, 2SC2878-B
Q305	A6342210	TRANSISTOR, 2SC2878-B
Q306	A6342210	TRANSISTOR, 2SC2878-B
Q307	A6044630	TRANSISTOR, 2SK246-GR, FET
Q308	A6044630	TRANSISTOR, 2SK246-GR, FET
Q309	A6044630	TRANSISTOR, 2SK246-GR, FET
Q310	A6044630	TRANSISTOR, 2SK246-GR, FET
Q311	A6342210	TRANSISTOR, 2SC2878-B
Q312	A6342210	TRANSISTOR, 2SC2878-B
Q401	A6044630	TRANSISTOR, 2SK246-GR, FET
Q402	A6044630	TRANSISTOR, 2SK246-GR, FET
Q403	B0358350	IC, TA7784P
Q404	A6534060	TRANSISTOR, 2SA1015-GR
Q405	A6044630	TRANSISTOR, 2SK246-GR, FET
Q406	A6044630	TRANSISTOR, 2SK246-GR, FET
Q407	A6342210	TRANSISTOR, 2SC2878-B
Q408	A6342210	TRANSISTOR, 2SC2878-B
Q409	A6317460	TRANSISTOR, 2SC1815-GR
Q410	A6317460	TRANSISTOR, 2SC1815-GR
Q411	22117814	IC, CX20187
Q412	A6317460	TRANSISTOR, 2SC1815-GR
Q413	A6317460	TRANSISTOR, 2SC1815-GR
Q414	A6317460	TRANSISTOR, 2SC1815-GR
Q415	A6317460	TRANSISTOR, 2SC1815-GR
Q416	A6753140	TRANSISTOR, 2SC982TM
Q417	A6317460	TRANSISTOR, 2SC1815-GR
Q418	A6317460	TRANSISTOR, 2SC1815-GR
Q419	A6342210	TRANSISTOR, 2SC2878-B
Q420	A6342210	TRANSISTOR, 2SC2878-B
Q421	A6534060	TRANSISTOR, 2SA1015-GR
Q422	A6317460	TRANSISTOR, 2SC1815-GR
Q423	22128056	IC, UPC4570H
Q425	A6317460	TRANSISTOR, 2SC1815-GR
Q426	A6317460	TRANSISTOR, 2SC1815-GR
Q427	A6317460	TRANSISTOR, 2SC1815-GR
Q428	A6317460	TRANSISTOR, 2SC1815-GR
Q429	A6044630	TRANSISTOR, 2SK246-GR, FET
Q430	A6044630	TRANSISTOR, 2SK246-GR, FET
Q431	A6040910	TRANSISTOR, 2SJ103-GR
Q432	A6040910	TRANSISTOR, 2SJ103-GR
Q433	A6044630	TRANSISTOR, 2SK246-GR, FET
Q434	A6044630	TRANSISTOR, 2SK246-GR, FET
Q435	A6044630	TRANSISTOR, 2SK246-GR, FET
Q436	A6044630	TRANSISTOR, 2SK246-GR, FET
Q437	A6534060	TRANSISTOR, 2SA1015-GR
Q438	A6534060	TRANSISTOR, 2SA1015-GR
Q439	A6534060	TRANSISTOR, 2SA1015-GR
Q440	A6317460	TRANSISTOR, 2SC1815-GR
Q441	A6534060	TRANSISTOR, 2SA1015-GR
Q551	A6321240	TRANSISTOR, 2SC2120-Y
Q552	A6534060	TRANSISTOR, 2SA1015-GR
Q553	A6317460	TRANSISTOR, 2SC1815-GR
Q554	A6325825	TRANSISTOR, 2SC2240-GR
Q555	A6325825	TRANSISTOR, 2SC2240-GR
Q601	22128308	IC, TMP42C70N-8134
Q602	B0487094	IC, TC74HC4094P
Q603	22128309	IC, TMP47C460AN-9264Z
Q604	A6534060	TRANSISTOR, 2SA1015-GR
Q605	A6532940	TRANSISTOR, 2SA950-Y
Q606	A6317460	TRANSISTOR, 2SC1815-GR
Q607	A6534060	TRANSISTOR, 2SA1015-GR
Q608	A6532940	TRANSISTOR, 2SA950-Y
Q609	A6317460	TRANSISTOR, 2SC1815-GR
Q610	B0358317	IC, TA7780BN
Q611	B0358317	IC, TA7780BN
Q612	B0274615	IC, TD62303P
Q613	A6534060	TRANSISTOR, 2SA1015-GR
Q614	A6317460	TRANSISTOR, 2SC1815-GR
Q615	A6317460	TRANSISTOR, 2SC1815-GR
Q616	A6534060	TRANSISTOR, 2SA1015-GR
Q617	A6317460	TRANSISTOR, 2SC1815-GR
Q618	A6317460	TRANSISTOR, 2SC1815-GR
Q619	22117550	IC, PST520D
Q620	A6317460	TRANSISTOR, 2SC1815-GR
Q621	A6040910	TRANSISTOR, 2SJ103-GR
Q622	22128056	IC, UPC4570H
Q623	A6534060	TRANSISTOR, 2SA1015-GR
Q624	A6317460	TRANSISTOR, 2SC1815-GR

Location No.	Part No.	Description
Q625	A6317460	TRANSISTOR, 2SC1815-GR
Q626	A6534060	TRANSISTOR, 2SA1015-GR
Q627	A6534060	TRANSISTOR, 2SA1015-GR
Q630	A6534060	TRANSISTOR, 2SA1015-GR
Q701	A6317460	TRANSISTOR, 2SC1815-GR
Q702	A6317460	TRANSISTOR, 2SC1815-GR
Q703	22128044	IC, BA3824LS
Q704	22128056	IC, UPC4570H
Q705	A6044630	TRANSISTOR, 2SK246-GR, FET
Q706	A6534060	TRANSISTOR, 2SA1015-GR
Q707	22128056	IC, UPC4570H
Q708	B0356660	IC, TA7666P
Q709	B0411760	IC, TC9176P
Q710	A6319300	TRANSISTOR, 2SC1959-Y
Q800	22128038	IC, STK4171V
Q801	A6534060	TRANSISTOR, 2SA1015-GR
Q802	A6534060	TRANSISTOR, 2SA1015-GR
Q803	A6531170	TRANSISTOR, 2SA817A-Y
Q804	A6314470	TRANSISTOR, 2SC1627A-Y
Q805	A6342210	TRANSISTOR, 2SC2878-B
Q806	A6342210	TRANSISTOR, 2SC2878-B
Q807	A6534060	TRANSISTOR, 2SA1015-GR
Q901	A6325540	TRANSISTOR, 2SC2236-Y
Q902	A6868350	TRANSISTOR, 2SD1413
Q903	A6868350	TRANSISTOR, 2SD1413
Q904	A6325540	TRANSISTOR, 2SC2236-Y
Q905	A6325540	TRANSISTOR, 2SC2236-Y
Q906	A6533240	TRANSISTOR, 2SA966-Y
Q907	A6753140	TRANSISTOR, 2SC982TM
Q908	A6534040	TRANSISTOR, 2SA1015-Y

DIODE

D401	22119223	DIODE, 1SS131
D402	22119223	DIODE, 1SS131
D403	22119223	DIODE, 1SS131
D404	22119223	DIODE, 1SS131
D405	22119223	DIODE, 1SS131
D406	22119223	DIODE, 1SS131
D409	22119223	DIODE, 1SS131
D410	22119223	DIODE, 1SS131
D411	22119223	DIODE, 1SS131
D413	22119223	DIODE, 1SS131
D414	22119223	DIODE, 1SS131
D415	22119223	DIODE, 1SS131
D601	A8603110	DIODE, TLR205, LED
D602	A8636560	DIODE, TLS163, LED
D603	A8636560	DIODE, TLS163, LED
D604	A8636560	DIODE, TLS163, LED
D605	A8636560	DIODE, TLS163, LED
D606	A8636560	DIODE, TLS163, LED
D607	22119223	DIODE, 1SS131
D608	22119223	DIODE, 1SS131
D609	22119223	DIODE, 1SS131
D611	22119223	DIODE, 1SS131
D612	22119223	DIODE, 1SS131
D613	22119223	DIODE, 1SS131
D614	22119223	DIODE, 1SS131
D615	22119223	DIODE, 1SS131
D616	A8606170	DIODE, TLG123A-F, LED
D617	A8606170	DIODE, TLG123A-F, LED
D618	A8606170	DIODE, TLG123A-F, LED
D619	A8606170	DIODE, TLG123A-F, LED
D620	A8606170	DIODE, TLG123A-F, LED
D621	A8606170	DIODE, TLG123A-F, LED
D622	A8606170	DIODE, TLG123A-F, LED
D623	A8636560	DIODE, TLS163, LED
D624	A8606170	DIODE, TLG123A-F, LED
D625	A8606170	DIODE, TLG123A-F, LED
D626	A8636560	DIODE, TLS163, LED
D627	A8612200	DIODE, TLO163, LED
D628	A8606170	DIODE, TLG123A-F, LED
D630	22119223	DIODE, 1SS131
D631	22119223	DIODE, 1SS131
D632	22119223	DIODE, 1SS131
D633	22119223	DIODE, 1SS131
D634	22119223	DIODE, 1SS131
D635	22119223	DIODE, 1SS131
D636	22119223	DIODE, 1SS131
D637	22119223	DIODE, 1SS131
D638	22119223	DIODE, 1SS131
D639	22119223	DIODE, 1SS131
D640	22119223	DIODE, 1SS131
D641	22119223	DIODE, 1SS131
D642	22119223	DIODE, 1SS131
D643	22119223	DIODE, 1SS131
D644	22119223	DIODE, 1SS131
D645	22119223	DIODE, 1SS131
D646	22119223	DIODE, 1SS131
D647	22119223	DIODE, 1SS131
D648	22119223	DIODE, 1SS131
D649	22119223	DIODE, 1SS131
D650	22119223	DIODE, 1SS131
D651	22119223	DIODE, 1SS131
D652	22119223	DIODE, 1SS131
D653	22119223	DIODE, 1SS131
D654	22119223	DIODE, 1SS131
D655	22119223	DIODE, 1SS131
D656	22119223	DIODE, 1SS131
D657	22119223	DIODE, 1SS131
D658	22119223	DIODE, 1SS131
D660	22119223	DIODE, 1SS131
D661	22119223	DIODE, 1SS131
D662	22119223	DIODE, 1SS131
D664	22119223	DIODE, 1SS131
D665	22119223	DIODE, 1SS131
D666	22119223	DIODE, 1SS131
D701	22119223	DIODE, 1SS131

Location No.	Part No.	Description
D702	A8636560	DIODE, TLS163, LED
D703	A8636560	DIODE, TLS163, LED
D704	A8636560	DIODE, TLS163, LED
D705	A8636560	DIODE, TLS163, LED
D706	A8636560	DIODE, TLS163, LED
D707	A8606170	DIODE, TLG123A-F, LED
D708	A8606170	DIODE, TLG123A-F, LED
D709	A8606170	DIODE, TLG123A-F, LED
D710	A8606170	DIODE, TLG123A-F, LED
D711	A8606170	DIODE, TLG123A-F, LED
D712	A8606170	DIODE, TLG123A-F, LED
D801	22119223	DIODE, 1SS131
D802	22119223	DIODE, 1SS131
D803	22119223	DIODE, 1SS131
D804	22119305	DIODE, MPG06B
D901	22119307	DIODE, KBPC602
D902	22119392	DIODE, 2W02
D903	A7112480	DIODE, 05AZ6.2-Y, ZENER
D904	A7112970	DIODE, 05AZ11-Z, ZENER
D905	A7112480	DIODE, 05AZ6.2-Y, ZENER
D906	22119305	DIODE, MPG06B
D907	22119223	DIODE, 1SS131
D908	22119304	DIODE, DF02M
D909	A7112880	DIODE, 05AZ10-Y, ZENER
D910	A7112880	DIODE, 05AZ10-Y, ZENER
D911	A7112570	DIODE, 05AZ6.8Z, ZENER
D913	22119223	DIODE, 1SS131

ELECTRICAL PARTS

Location No.	Part No.	Description
⚠ EP01	22176286	POWER CORD
EP02	22165047	HOLDER, FUSE
⚠ F901	22144357	FUSE, 250V, 1.25A, T
J301	22198282	JACK, US-4P PHONO/CD
J302	22198282	JACK, US-4P AUX1/AUX2
J601	22186141	CONNECTOR, 10P
J602	22186009	SOCKET, 5P, CONTROL
J701	22198319	JACK, 6.3MM MIC
J801	22198318	JACK, 6.3MM HEADPHONE
J802	22198012	JACK, US-2P SURROUND
J803	22162546	TERMINAL, 4P, SPEAKER
J804	22198285	JACK, 3.5MM PHONO
L401	22232278	CHOKE COIL, 8.2MH
L402	22232278	CHOKE COIL, 8.2MH
L551	22153475	COIL, OSCILLATOR BIAS
L601	22291195	CHOKE COIL, 470UH
L801	22210152	CHOKE COIL, 4UH
L802	22210152	CHOKE COIL, 4UH
L901	22147307	SOLENOID A DECK
L902	22147307	SOLENOID B DECK
⚠ P902	22118226	IC PROTECTOR, ICP-F38-1.5A
S401	22196721	SLIDE SWITCH DOLBY
S551	22196740	SLIDE SWITCH BEAT CUT
S601	22196975	KEY SWITCH POWER
S602	22196975	KEY SWITCH VOLUME UP
S603	22196975	KEY SWITCH VOLUME DOWN
S604	22196975	KEY SWITCH HI DUBBBING
S605	22196992	KEY SWITCH SURROUND
S606	22196975	KEY SWITCH REW/FF
S607	22196975	KEY SWITCH REVERSE PLAY
S608	22196975	KEY SWITCH STOP
S609	22196975	KEY SWITCH FOWARD PLAY
S610	22196975	KEY SWITCH FF/REW
S611	22196975	KEY SWITCH REW/FF
S612	22196975	KEY SWITCH REVERSE PLAY
S613	22196975	KEY SWITCH STOP
S614	22196975	KEY SWITCH FOWARD PLAY
S615	22196975	KEY SWITCH FF/REW
S616	22196975	KEY SWITCH REC/PAUSE
S617	22196975	KEY SWITCH REC/MUTE
S618	22196721	SLIDE SWITCH RECORD/PLAYBACK
S619	22196721	SLIDE SWITCH AUTO REVERSE
S620	22196975	KEY SWITCH AUX1
S621	22196975	KEY SWITCH AUX2
S622	22196975	KEY SWITCH PHONO

Location No.	Part No.	Description
S623	22196975	KEY SWITCH TUNER
S624	22196975	KEY SWITCH CD
S630	22196929	KEY SWITCH RESET
S801	22196704	LEAF SWITCH DETECT
S802	22196704	LEAF SWITCH CrO2
S803	22196704	LEAF SWITCH REC PROTECT A
S804	22196704	LEAF SWITCH REC PROTECT B
S805	22196704	LEAF SWITCH DETECT
S806	22196704	LEAF SWITCH CrO2
S901	22148144	RELAY AC POWER
⚠ T901	22225634	POWER TRANSFORMER MAIN
⚠ T902	22225635	POWER TRANSFORMER SUB
Z401	22153474	FILTER, DOLBY DOLBY
Z402	22153474	FILTER, DOLBY
Z403	22153473	FILTER, CERAMIC DOLBY C
Z404	22153473	FILTER, CERAMIC
Z405	22153366	COIL, BIAS TRAP
Z406	22153366	COIL, BIAS TRAP
Z601	22117931	IC, BX1407-RM
Z602	22153444	OSCILLATOR, CERAMIC, 2MHZ
Z603	22153443	OSCILLATOR, CERAMIC, 4.19MHZ
Z604	20540008	COMPOSITE PARTS, RESISTOR
Z605	20540008	COMPOSITE PARTS, RESISTOR

CAPACITORS

C301	20418479	EL, 4.7MFD, 50V
C302	20418479	EL, 4.7MFD, 50V
C303	20416470	EL, 47MFD, 25V
C304	20416470	EL, 47MFD, 25V
C305	20318222	BL, 2200PF, 25V, K
C306	20318222	BL, 2200PF, 25V, K
C307	20318822	BL, 8200PF, 25V, K
C308	20318822	BL, 8200PF, 25V, K
C309	20418479	EL, 4.7MFD, 50V
C310	20418479	EL, 4.7MFD, 50V
C311	20414101	EL, 100MFD, 10V
C312	20414101	EL, 100MFD, 10V
C313	20343221	CD, 220PF, 50V, K
C314	20343221	CD, 220PF, 50V, K
C315	20418479	EL, 4.7MFD, 50V
C316	20418479	EL, 4.7MFD, 50V
C317	20418479	EL, 4.7MFD, 50V
C318	20418479	EL, 4.7MFD, 50V
C319	20341473	CD, 0.047MFD, 50V, Z
C320	20341473	CD, 0.047MFD, 50V, Z
C321	20343331	CD, 330PF, 50V, K
C322	20343331	CD, 330PF, 50V, K
C323	20343561	CD, 560PF, 50V, K
C324	20343561	CD, 560PF, 50V, K
C325	20343331	CD, 330PF, 50V, K
C326	20343331	CD, 330PF, 50V, K
C401	20418109	EL, 1MFD, 50V
C402	20418109	EL, 1MFD, 50V
C403	20343471	CD, 470PF, 50V, K
C404	20343471	CD, 470PF, 50V, K
C405	20343101	CD, 100PF, 50V, K
C406	20343101	CD, 100PF, 50V, K
C407	20343331	CD, 330PF, 50V, K
C408	20343331	CD, 330PF, 50V, K
C409	20343331	CD, 330PF, 50V, K
C410	20343331	CD, 330PF, 50V, K
C411	20416470	EL, 47MFD, 25V
C412	20416470	EL, 47MFD, 25V
C413	20371103	MY, 0.01MFD, 50V, J
C414	20371103	MY, 0.01MFD, 50V, J
C415	20343101	CD, 100PF, 50V, K
C416	20343101	CD, 100PF, 50V, K
C417	20418339	EL, 3.3MFD, 50V
C418	20418339	EL, 3.3MFD, 50V
C419	20418100	EL, 10MFD, 50V
C420	20418100	EL, 10MFD, 50V
C421	20414101	EL, 100MFD, 10V
C422	20414221	EL, 220MFD, 10V
C423	20418229	EL, 2.2MFD, 50V
C424	20418229	EL, 2.2MFD, 50V
C425	20343102	CD, 1000PF, 50V, K
C426	20343102	CD, 1000PF, 50V, K
C427	20418229	EL, 2.2MFD, 50V
C428	20418229	EL, 2.2MFD, 50V
C429	20418479	EL, 4.7MFD, 50V
C430	20418479	EL, 4.7MFD, 50V
C431	20418229	EL, 2.2MFD, 50V
C432	20418229	EL, 2.2MFD, 50V
C433	20371272	MY, 2700PF, 50V, J
C434	20371272	MY, 2700PF, 50V, J
C435	20418479	EL, 4.7MFD, 50V
C436	20418479	EL, 4.7MFD, 50V
C437	20371472	MY, 4700PF, 50V, J
C438	20371472	MY, 4700PF, 50V, J
C439	20418478	EL, 0.47MFD, 50V
C440	20418478	EL, 0.47MFD, 50V
C441	20418158	EL, 0.15MFD, 50V
C442	20418158	EL, 0.15MFD, 50V
C443	20371153	MY, 0.015MFD, 50V, J

Location No.	Part No.	Description
C444	20371153	MY, 0.015MFD, 50V, J
C445	20418228	EL, 0.22MFD, 50V
C446	20418228	EL, 0.22MFD, 50V
C447	20371683	MY, 0.068MFD, 50V, J
C448	20371683	MY, 0.068MFD, 50V, J
C449	20371473	MY, 0.047MFD, 50V, J
C450	20371473	MY, 0.047MFD, 50V, J
C451	20371682	MY, 6800PF, 50V, J
C452	20371682	MY, 6800PF, 50V, J
C453	20371103	MY, 0.01MFD, 50V, J
C454	20371103	MY, 0.01MFD, 50V, J
C455	20418479	EL, 4.7MFD, 50V
C456	20418479	EL, 4.7MFD, 50V
C457	20413331	EL, 330MFD, 6.3V
C458	20413331	EL, 330MFD, 6.3V
C459	20414221	EL, 220MFD, 10V
C460	20418100	EL, 10MFD, 50V
C461	20416470	EL, 47MFD, 25V
C462	20341223	CD, 0.022MFD, 50V, Z
C463	20418479	EL, 4.7MFD, 50V
C464	20418479	EL, 4.7MFD, 50V
C465	20418479	EL, 4.7MFD, 50V
C466	20418479	EL, 4.7MFD, 50V
C467	20418229	EL, 2.2MFD, 50V
C468	20341223	CD, 0.022MFD, 50V, Z
C469	20418479	EL, 4.7MFD, 50V
C470	20418479	EL, 4.7MFD, 50V
C471	20371102	MY, 1000PF, 50V, J
C472	20371102	MY, 1000PF, 50V, J
C473	20418100	EL, 10MFD, 50V
C474	20418100	EL, 10MFD, 50V
C475	20371392	MY, 3900PF, 50V, J
C476	20371392	MY, 3900PF, 50V, J
C477	20371682	MY, 6800PF, 50V, J
C478	20371682	MY, 6800PF, 50V, J
C479	20371153	MY, 0.015MFD, 50V, J
C480	20371153	MY, 0.015MFD, 50V, J
C481	20418479	EL, 4.7MFD, 50V
C482	20418479	EL, 4.7MFD, 50V
C483	20414101	EL, 100MFD, 10V
C484	20414101	EL, 100MFD, 10V
C485	20343471	CD, 470PF, 50V, K
C486	20343471	CD, 470PF, 50V, K
C487	20311180	CD, 18PF, 50V, J
C488	20311180	CD, 18PF, 50V, J
C489	20343221	CD, 220PF, 50V, K
C490	20343221	CD, 220PF, 50V, K
C491	20418109	EL, 1MFD, 50V
C492	20418109	EL, 1MFD, 50V
C493	20341473	CD, 0.047MFD, 50V, Z
C494	20418109	EL, 1MFD, 50V
C495	20418479	EL, 4.7MFD, 50V
C496	20418478	EL, 0.47MFD, 50V
C497	20416470	EL, 47MFD, 25V

Location No.	Part No.	Description
C499	20343471	CD, 470PF, 50V, K
C500	20343471	CD, 470PF, 50V, K
C551	20418339	EL, 3.3MFD, 50V
C552	20343103	CD, 0.01MFD, 50V, K
C553	20343103	CD, 0.01MFD, 50V, K
C554	20414101	EL, 100MFD, 10V
C555	20381152	PP, 1500PF, 100V, J
C556	20381561	PP, 560PF, 100V, J
C557	20381122	PP, 1200PF, 100V, J
C558	20343102	CD, 1000PF, 50V, K
C559	20343102	CD, 1000PF, 50V, K
C560	20341473	CD, 0.047MFD, 50V, Z
C561	20416470	EL, 47MFD, 25V
C601	20414101	EL, 100MFD, 10V
C602	20318473	BL, 0.047MFD, 25V, K
C603	20343101	CD, 100PF, 50V, K
C604	20414221	EL, 220MFD, 10V
C605	20318473	BL, 0.047MFD, 25V, K
C606	20416470	EL, 47MFD, 25V
C607	20418109	EL, 1MFD, 50V
C608	20418220	EL, 22MFD, 50V
C609	20418100	EL, 10MFD, 50V
C610	20416470	EL, 47MFD, 25V
C611	20418109	EL, 1MFD, 50V
C612	20418220	EL, 22MFD, 50V
C613	20418100	EL, 10MFD, 50V
C614	20343681	CD, 680PF, 50V, K
C615	20343681	CD, 680PF, 50V, K
C616	20414101	EL, 100MFD, 10V
C617	20341473	CD, 0.047MFD, 50V, Z
C618	20418479	EL, 4.7MFD, 50V
C619	20418338	EL, 0.33MFD, 50V
C620	20343101	CD, 100PF, 50V, K
C621	20341223	CD, 0.022MFD, 50V, Z
C622	20311560	CD, 56PF, 50V, J
C623	20343103	CD, 0.01MFD, 50V, K
C624	20341473	CD, 0.047MFD, 50V, Z
C625	20418228	EL, 0.22MFD, 50V
C626	20418479	EL, 4.7MFD, 50V
C627	20343331	CD, 330PF, 50V, K
C628	20343472	CD, 4700PF, 50V, K
C629	20418479	EL, 4.7MFD, 50V
C630	20341473	CD, 0.047MFD, 50V, Z
C631	20341473	CD, 0.047MFD, 50V, Z
C632	20341473	CD, 0.047MFD, 50V, Z
C633	20343221	CD, 220PF, 50V, K
C634	20343221	CD, 220PF, 50V, K
C636	20343331	CD, 330PF, 50V, K
C637	20343331	CD, 330PF, 50V, K
C638	20341223	CD, 0.022MFD, 50V, Z
C639	20341223	CD, 0.022MFD, 50V, Z
C701	20418479	EL, 4.7MFD, 50V
C702	20311820	CD, 82PF, 50V, J
C703	20418220	EL, 22MFD, 50V
C704	20418479	EL, 4.7MFD, 50V

Location No.	Part No.	Description
C705	20416470	EL, 47MFD, 25V
C706	20318473	BL, 0.047MFD, 25V, K
C707	20418479	EL, 4.7MFD, 50V
C708	20418479	EL, 4.7MFD, 50V
C709	20418229	EL, 2.2MFD, 50V
C710	20418229	EL, 2.2MFD, 50V
C711	20318183	BL, 0.018MFD, 25V, K
C712	20318183	BL, 0.018MFD, 25V, K
C713	20418338	EL, 0.33MFD, 50V
C714	20418338	EL, 0.33MFD, 50V
C715	20318822	BL, 8200PF, 25V, K
C716	20318822	BL, 8200PF, 25V, K
C717	20318683	BL, 0.068MFD, 25V, K
C718	20318683	BL, 0.068MFD, 25V, K
C719	20318222	BL, 2200PF, 25V, K
C720	20318222	BL, 2200PF, 25V, K
C721	20318153	BL, 0.015MFD, 25V, K
C722	20318153	BL, 0.015MFD, 25V, K
C723	20343681	CD, 680PF, 50V, K
C724	20343681	CD, 680PF, 50V, K
C725	20318123	BL, 0.012MFD, 25V, K
C726	20318123	BL, 0.012MFD, 25V, K
C727	20343101	CD, 100PF, 50V, K
C728	20343101	CD, 100PF, 50V, K
C729	20414221	EL, 220MFD, 10V
C730	20414221	EL, 220MFD, 10V
C731	20418479	EL, 4.7MFD, 50V
C732	20418479	EL, 4.7MFD, 50V
C733	20418479	EL, 4.7MFD, 50V
C734	20418479	EL, 4.7MFD, 50V
C735	20418479	EL, 4.7MFD, 50V
C736	20418479	EL, 4.7MFD, 50V
C737	20414221	EL, 220MFD, 10V
C738	20414221	EL, 220MFD, 10V
C739	20418479	EL, 4.7MFD, 50V
C740	20418479	EL, 4.7MFD, 50V
C741	20311270	CD, 27PF, 50V, J
C742	20311270	CD, 27PF, 50V, J
C743	20418479	EL, 4.7MFD, 50V
C744	20418479	EL, 4.7MFD, 50V
C745	20418479	EL, 4.7MFD, 50V
C746	20418479	EL, 4.7MFD, 50V
C747	20318333	BL, 0.033MFD, 25V, K
C748	20318333	BL, 0.033MFD, 25V, K
C749	20418229	EL, 2.2MFD, 50V
C750	20418229	EL, 2.2MFD, 50V
C751	20414221	EL, 220MFD, 10V
C752	20414221	EL, 220MFD, 10V
C753	20414221	EL, 220MFD, 10V
C754	20343331	CD, 330PF, 50V, K
C755	20343331	CD, 330PF, 50V, K
C756	20343331	CD, 330PF, 50V, K
C757	20414471	EL, 470MFD, 10V
C801	20343102	CD, 1000PF, 50V, K
C802	20343102	CD, 1000PF, 50V, K

Location No.	Part No.	Description
C803	20418229	EL, 2.2MFD, 50V
C804	20418229	EL, 2.2MFD, 50V
C805	20419220	EL, 22MFD, 50V
C806	20419220	EL, 22MFD, 50V
C807	20416470	EL, 47MFD, 25V
C808	20416470	EL, 47MFD, 25V
C809	20371333	MY, 0.033MFD, 50V, J
C810	20371333	MY, 0.033MFD, 50V, J
C811	20371104	MY, 0.1MFD, 50V, J
C812	20418109	EL, 1MFD, 50V
C813	20418101	EL, 100MFD, 50V
C814	20418100	EL, 10MFD, 50V
C815	20371223	MY, 0.022MFD, 50V, J
C816	20371223	MY, 0.022MFD, 50V, J
C817	20418109	EL, 1MFD, 50V
C818	20341473	CD, 0.047MFD, 50V, Z
C819	20341473	CD, 0.047MFD, 50V, Z
C820	20341223	CD, 0.022MFD, 50V, Z
C821	20419220	EL, 22MFD, 50V
C822	20419220	EL, 22MFD, 50V
C823	20418100	EL, 10MFD, 50V
C825	20343471	CD, 470PF, 50V, K
C826	20343471	CD, 470PF, 50V, K
C827	20341223	CD, 0.022MFD, 50V, Z
C828	20341223	CD, 0.022MFD, 50V, Z
C829	20343682	CD, 6800PF, 50V, K
C830	20343682	CD, 6800PF, 50V, K
C831	20341223	CD, 0.022MFD, 50V, Z
C832	20343331	CD, 330PF, 50V, K
C833	20343331	CD, 330PF, 50V, K
⚠ C900	22340229	CD, 4700PF, 400V, M
C901	20341223	CD, 0.022MFD, 50V, Z
C902	20341223	CD, 0.022MFD, 50V, Z
C903	20440007	EL, 6800MFD, 50V
C904	20440007	EL, 6800MFD, 50V
C906	20416101	EL, 100MFD, 25V
C907	20414101	EL, 100MFD, 10V
C908	20341223	CD, 0.022MFD, 50V, Z
C909	20341223	CD, 0.022MFD, 50V, Z
C910	20416472	EL, 4700MFD, 25V
C911	20416101	EL, 100MFD, 25V
C912	20414101	EL, 100MFD, 10V
C913	20414101	EL, 100MFD, 10V
C914	20414101	EL, 100MFD, 10V
C915	20341223	CD, 0.022MFD, 50V, Z
C916	20341223	CD, 0.022MFD, 50V, Z
C917	20416102	EL, 1000MFD, 25V
C918	20416102	EL, 1000MFD, 25V
C919	20415221	EL, 220MFD, 16V
C920	20414101	EL, 100MFD, 10V
C921	20418100	EL, 10MFD, 50V
C922	20418100	EL, 10MFD, 50V
C923	22440780	EL, 0.047MFD, 5V
C924	20415221	EL, 220MFD, 16V

Location No.	Part No.	Description
C925	20414101	EL, 100MFD, 10V
C926	20418478	EL, 0.47MFD, 50V

RESISTORS

Location No.	Part No.	Description
R301	20512102	CF, 1K OHM, 1/6W, J
R302	20512102	CF, 1K OHM, 1/6W, J
R303	20512104	CF, 100K OHM, 1/6W, J
R304	20512104	CF, 100K OHM, 1/6W, J
R305	20512333	CF, 33K OHM, 1/6W, J
R306	20512333	CF, 33K OHM, 1/6W, J
R307	20512394	CF, 390K OHM, 1/6W, J
R308	20512394	CF, 390K OHM, 1/6W, J
R309	20512821	CF, 820 OHM, 1/6W, J
R310	20512821	CF, 820 OHM, 1/6W, J
R311	20512104	CF, 100K OHM, 1/6W, J
R312	20512104	CF, 100K OHM, 1/6W, J
R313	20512221	CF, 220 OHM, 1/6W, J
R314	20512221	CF, 220 OHM, 1/6W, J
R315	20512562	CF, 5.6K OHM, 1/6W, J
R316	20512562	CF, 5.6K OHM, 1/6W, J
R317	20512393	CF, 39K OHM, 1/6W, J
R318	20512393	CF, 39K OHM, 1/6W, J
R319	20512562	CF, 5.6K OHM, 1/6W, J
R320	20512562	CF, 5.6K OHM, 1/6W, J
R321	20512393	CF, 39K OHM, 1/6W, J
R322	20512393	CF, 39K OHM, 1/6W, J
R323	20512272	CF, 2.7K OHM, 1/6W, J
R324	20512272	CF, 2.7K OHM, 1/6W, J
R325	20512222	CF, 2.2K OHM, 1/6W, J
R326	20512222	CF, 2.2K OHM, 1/6W, J
R327	20512104	CF, 100K OHM, 1/6W, J
R328	20512104	CF, 100K OHM, 1/6W, J
R329	20512224	CF, 220K OHM, 1/6W, J
R330	20512224	CF, 220K OHM, 1/6W, J
R331	20512332	CF, 3.3K OHM, 1/6W, J
R332	20512332	CF, 3.3K OHM, 1/6W, J
R333	20512472	CF, 4.7K OHM, 1/6W, J
R334	20512472	CF, 4.7K OHM, 1/6W, J
R335	20512102	CF, 1K OHM, 1/6W, J
R336	20512102	CF, 1K OHM, 1/6W, J
R337	20512102	CF, 1K OHM, 1/6W, J
R338	20512102	CF, 1K OHM, 1/6W, J
R339	20512104	CF, 100K OHM, 1/6W, J
R340	20512104	CF, 100K OHM, 1/6W, J
R341	20512563	CF, 56K OHM, 1/6W, J
R342	20512563	CF, 56K OHM, 1/6W, J
R343	20512562	CF, 5.6K OHM, 1/6W, J
R344	20512562	CF, 5.6K OHM, 1/6W, J
R345	20512562	CF, 5.6K OHM, 1/6W, J
R346	20512562	CF, 5.6K OHM, 1/6W, J
R347	20512103	CF, 10K OHM, 1/6W, J
R348	20512103	CF, 10K OHM, 1/6W, J
R349	20512223	CF, 22K OHM, 1/6W, J
R350	20512223	CF, 22K OHM, 1/6W, J
R351	20512224	CF, 220K OHM, 1/6W, J
R352	20512224	CF, 220K OHM, 1/6W, J
R401	20512102	CF, 1K OHM, 1/6W, J
R402	20512102	CF, 1K OHM, 1/6W, J
R403	20512104	CF, 100K OHM, 1/6W, J
R404	20512104	CF, 100K OHM, 1/6W, J
R405	22658940	VARIABLE, SEMI FIXED. 500-B
R406	22658940	VARIABLE, SEMI FIXED. 500-B
R407	20512123	CF, 12K OHM, 1/6W, J
R408	20512123	CF, 12K OHM, 1/6W, J
R409	20512183	CF, 18K OHM, 1/6W, J
R410	20512183	CF, 18K OHM, 1/6W, J
R411	20512334	CF, 330K OHM, 1/6W, J
R412	20512334	CF, 330K OHM, 1/6W, J
R413	20512223	CF, 22K OHM, 1/6W, J
R414	20512223	CF, 22K OHM, 1/6W, J
R415	22658944	VARIABLE, SEMI FIXED, 10K-B
R416	22658944	VARIABLE, SEMI FIXED, 10K-B
R417	20512332	CF, 3.3K OHM, 1/6W, J
R418	20512332	CF, 3.3K OHM, 1/6W, J
R419	20512562	CF, 5.6K OHM, 1/6W, J
R420	20512562	CF, 5.6K OHM, 1/6W, J
R421	20512152	CF, 1.5K OHM, 1/6W, J
R422	20512152	CF, 1.5K OHM, 1/6W, J
R423	20513106	CF, 10M OHM, 1/4W, J
R424	20513106	CF, 10M OHM, 1/4W, J
R425	20512333	CF, 33K OHM, 1/6W, J
R426	20512473	CF, 47K OHM, 1/6W, J
R427	20512473	CF, 47K OHM, 1/6W, J
R428	20512224	CF, 220K OHM, 1/6W, J
R429	20512103	CF, 10K OHM, 1/6W, J
R430	20512103	CF, 10K OHM, 1/6W, J
R431	20512622	CF, 6.2K OHM, 1/6W, J
R432	20512622	CF, 6.2K OHM, 1/6W, J
R433	20512682	CF, 6.8K OHM, 1/6W, J
R434	20512682	CF, 6.8K OHM, 1/6W, J
R435	20512622	CF, 6.2K OHM, 1/6W, J
R436	20512622	CF, 6.2K OHM, 1/6W, J
R437	20512334	CF, 330K OHM, 1/6W, J
R438	20512334	CF, 330K OHM, 1/6W, J
R439	20512123	CF, 12K OHM, 1/6W, J
R440	20512123	CF, 12K OHM, 1/6W, J
R441	20512223	CF, 22K OHM, 1/6W, J
R442	20512223	CF, 22K OHM, 1/6W, J
R443	20512431	CF, 430 OHM, 1/6W, J
R444	20512431	CF, 430 OHM, 1/6W, J
R445	20512332	CF, 3.3K OHM, 1/6W, J
R446	20512332	CF, 3.3K OHM, 1/6W, J
R447	20512332	CF, 3.3K OHM, 1/6W, J
R448	20512332	CF, 3.3K OHM, 1/6W, J
R449	20512682	CF, 6.8K OHM, 1/6W, J
R450	20512682	CF, 6.8K OHM, 1/6W, J
R451	20512223	CF, 22K OHM, 1/6W, J
R452	20512223	CF, 22K OHM, 1/6W, J

Location No.	Part No.	Description
R453	22570777	MF, 100K OHM, 1/6W, F
R454	20512332	CF, 3.3K OHM, 1/6W, J
R455	20512223	CF, 22K OHM, 1/6W, J
R456	20512473	CF, 47K OHM, 1/6W, J
R457	20512223	CF, 22K OHM, 1/6W, J
R458	20512223	CF, 22K OHM, 1/6W, J
R459	20512103	CF, 10K OHM, 1/6W, J
R461	20512472	CF, 4.7K OHM, 1/6W, J
R462	20512472	CF, 4.7K OHM, 1/6W, J
R463	20512103	CF, 10K OHM, 1/6W, J
R464	20512103	CF, 10K OHM, 1/6W, J
R465	20512102	CF, 1K OHM, 1/6W, J
R466	20512102	CF, 1K OHM, 1/6W, J
R467	20512155	CF, 1.5M OHM, 1/6W, J
R468	20512155	CF, 1.5M OHM, 1/6W, J
R469	20512472	CF, 4.7K OHM, 1/6W, J
R470	20512472	CF, 4.7K OHM, 1/6W, J
R471	20512473	CF, 47K OHM, 1/6W, J
R472	20512473	CF, 47K OHM, 1/6W, J
R473	20512223	CF, 22K OHM, 1/6W, J
R475	20512223	CF, 22K OHM, 1/6W, J
R476	20512221	CF, 220 OHM, 1/6W, J
R477	22658946	VARIABLE, SEMI FIXED, 50K-B
R478	22658946	VARIABLE, SEMI FIXED, 50K-B
R479	20512272	CF, 2.7K OHM, 1/6W, J
R480	20512272	CF, 2.7K OHM, 1/6W, J
R481	20512273	CF, 27K OHM, 1/6W, J
R482	20512273	CF, 27K OHM, 1/6W, J
R483	20512103	CF, 10K OHM, 1/6W, J
R484	20512103	CF, 10K OHM, 1/6W, J
R485	20512104	CF, 100K OHM, 1/6W, J
R486	20512222	CF, 2.2K OHM, 1/6W, J
R487	20512104	CF, 100K OHM, 1/6W, J
R488	20512104	CF, 100K OHM, 1/6W, J
R489	20512563	CF, 56K OHM, 1/6W, J
R490	20512563	CF, 56K OHM, 1/6W, J
R491	20512333	CF, 33K OHM, 1/6W, J
R492	20512333	CF, 33K OHM, 1/6W, J
R493	20512680	CF, 68 OHM, 1/6W, J
R494	20512680	CF, 68 OHM, 1/6W, J
R495	20512472	CF, 4.7K OHM, 1/6W, J
R496	20512472	CF, 4.7K OHM, 1/6W, J
R497	20512273	CF, 27K OHM, 1/6W, J
R498	20512273	CF, 27K OHM, 1/6W, J
R499	20512103	CF, 10K OHM, 1/6W, J
R500	20512103	CF, 10K OHM, 1/6W, J
R501	20512223	CF, 22K OHM, 1/6W, J
R502	20512223	CF, 22K OHM, 1/6W, J
R503	20512153	CF, 15K OHM, 1/6W, J
R504	20512153	CF, 15K OHM, 1/6W, J
R505	20512223	CF, 22K OHM, 1/6W, J
R506	20512223	CF, 22K OHM, 1/6W, J
R507	20512223	CF, 22K OHM, 1/6W, J
R508	20512153	CF, 15K OHM, 1/6W, J
R509	20512102	CF, 1K OHM, 1/6W, J
R510	20512122	CF, 1.2K OHM, 1/6W, J
R511	20512223	CF, 22K OHM, 1/6W, J
R512	20512102	CF, 1K OHM, 1/6W, J
R513	20512104	CF, 100K OHM, 1/6W, J
R514	20512104	CF, 100K OHM, 1/6W, J
R515	20512473	CF, 47K OHM, 1/6W, J
R516	20512104	CF, 100K OHM, 1/6W, J
R517	20512473	CF, 47K OHM, 1/6W, J
R518	20512224	CF, 220K OHM, 1/6W, J
R519	20512224	CF, 220K OHM, 1/6W, J
R520	20512224	CF, 220K OHM, 1/6W, J
R521	20512123	CF, 12K OHM, 1/6W, J
R522	20512123	CF, 12K OHM, 1/6W, J
R523	20512103	CF, 10K OHM, 1/6W, J
R524	20512103	CF, 10K OHM, 1/6W, J
R525	20512225	CF, 2.2M OHM, 1/6W, J
R526	20512225	CF, 2.2M OHM, 1/6W, J
R527	20512224	CF, 220K OHM, 1/6W, J
R528	20512224	CF, 220K OHM, 1/6W, J
R529	20512102	CF, 1K OHM, 1/6W, J
R530	20512102	CF, 1K OHM, 1/6W, J
R531	20512225	CF, 2.2M OHM, 1/6W, J
R532	20512225	CF, 2.2M OHM, 1/6W, J
R533	20513106	CF, 10M OHM, 1/4W, J
R534	20513106	CF, 10M OHM, 1/4W, J
R535	20512183	CF, 18K OHM, 1/6W, J
R536	20512183	CF, 18K OHM, 1/6W, J
R537	22658947	VARIABLE, SEMI FIXED, 100K-B
R538	22658947	VARIABLE, SEMI FIXED, 100K-B
R539	20512225	CF, 2.2M OHM, 1/6W, J
R540	20512225	CF, 2.2M OHM, 1/6W, J
R541	20512221	CF, 220 OHM, 1/6W, J
R543	20512104	CF, 100K OHM, 1/6W, J
R544	20512104	CF, 100K OHM, 1/6W, J
R545	20512102	CF, 1K OHM, 1/6W, J
R546	20512102	CF, 1K OHM, 1/6W, J
R547	20512474	CF, 470K OHM, 1/6W, J
R548	20512474	CF, 470K OHM, 1/6W, J
R549	20512681	CF, 680 OHM, 1/6W, J
R550	20512681	CF, 680 OHM, 1/6W, J
R551	20512332	CF, 3.3K OHM, 1/6W, J
R552	20512104	CF, 100K OHM, 1/6W, J
R553	20512332	CF, 3.3K OHM, 1/6W, J
R554	20512330	CF, 33 OHM, 1/6W, J
⚠ R555	22500274	FUSIBLE,4.7 OHM, 1/4W, J
R556	20516680	CF, 68 OHM, 1/2W, J
R557	20512332	CF, 3.3K OHM, 1/6W, J
R558	20512222	CF, 2.2K OHM, 1/6W, J
R559	20512103	CF, 10K OHM, 1/6W, J
R560	20512103	CF, 10K OHM, 1/6W, J
R561	20512223	CF, 22K OHM, 1/6W, J
R591	20512223	CF, 22K OHM, 1/6W, J
R592	20512562	CF, 5.6K OHM, 1/6W, J
R593	20512104	CF, 100K OHM, 1/6W, J
R594	20512473	CF, 47K OHM, 1/6W, J

Location No.	Part No.	Description
R596	20512103	CF, 10K OHM, 1/6W, J
R597	20512104	CF, 100K OHM, 1/6W, J
R601	20512103	CF, 10K OHM, 1/6W, J
R602	20512103	CF, 10K OHM, 1/6W, J
R603	20512103	CF, 10K OHM, 1/6W, J
R604	20512821	CF, 820 OHM, 1/6W, J
R605	20512821	CF, 820 OHM, 1/6W, J
R606	20512821	CF, 820 OHM, 1/6W, J
R607	20512821	CF, 820 OHM, 1/6W, J
R608	20512562	CF, 5.6K OHM, 1/6W, J
R609	20512562	CF, 5.6K OHM, 1/6W, J
R610	20512104	CF, 100K OHM, 1/6W, J
R611	20512104	CF, 100K OHM, 1/6W, J
R612	20512104	CF, 100K OHM, 1/6W, J
R613	20512104	CF, 100K OHM, 1/6W, J
R614	20512104	CF, 100K OHM, 1/6W, J
R615	20512103	CF, 10K OHM, 1/6W, J
R616	20512271	CF, 270 OHM, 1/6W, J
R617	20512821	CF, 820 OHM, 1/6W, J
R621	22658943	VARIABLE, SEMI FIXED. 5K-B
R622	20512472	CF, 4.7K OHM, 1/6W, J
R623	22658941	VARIABLE, SEMI FIXED, 1K-B
R624	20512220	CF, 22 OHM, 1/6W, J
R625	20512223	CF, 22K OHM, 1/6W, J
R626	20512473	CF, 47K OHM, 1/6W, J
R627	20512471	CF, 470 OHM, 1/6W, J
R628	20512153	CF, 15K OHM, 1/6W, J
R629	20512680	CF, 68 OHM, 1/6W, J
R630	20512103	CF, 10K OHM, 1/6W, J
R631	20512153	CF, 15K OHM, 1/6W, J
R632	20516121	CF, 120 OHM, 1/2W, J
R633	20512223	CF, 22K OHM, 1/6W, J
R634	20512473	CF, 47K OHM, 1/6W, J
R635	20512223	CF, 22K OHM, 1/6W, J
R636	22658941	VARIABLE, SEMI FIXED, 1K-B
R637	20512220	CF, 22 OHM, 1/6W, J
R638	20512472	CF, 4.7K OHM, 1/6W, J
R639	22658943	VARIABLE, SEMI FIXED. 5K-B
R640	20512471	CF, 470 OHM, 1/6W, J
R641	20512153	CF, 15K OHM, 1/6W, J
R642	20512680	CF, 68 OHM, 1/6W, J
R643	20512103	CF, 10K OHM, 1/6W, J
R644	20512153	CF, 15K OHM, 1/6W, J
R645	20516121	CF, 120 OHM, 1/2W, J
R646	20512223	CF, 22K OHM, 1/6W, J
R647	20512223	CF, 22K OHM, 1/6W, J
R648	20512331	CF, 330 OHM, 1/6W, J
R649	20512331	CF, 330 OHM, 1/6W, J
R650	20512561	CF, 560 OHM, 1/6W, J
R651	20512331	CF, 330 OHM, 1/6W, J
R652	20512331	CF, 330 OHM, 1/6W, J
R653	20512561	CF, 560 OHM, 1/6W, J
R654	20512471	CF, 470 OHM, 1/6W, J
R655	20512223	CF, 22K OHM, 1/6W, J
R656	20512562	CF, 5.6K OHM, 1/6W, J

Location No.	Part No.	Description
R657	20512562	CF, 5.6K OHM, 1/6W, J
R658	20512562	CF, 5.6K OHM, 1/6W, J
R659	20512223	CF, 22K OHM, 1/6W, J
R660	20512223	CF, 22K OHM, 1/6W, J
R661	20512334	CF, 330K OHM, 1/6W, J
R662	20512103	CF, 10K OHM, 1/6W, J
R663	20512562	CF, 5.6K OHM, 1/6W, J
R664	20512562	CF, 5.6K OHM, 1/6W, J
R665	20512562	CF, 5.6K OHM, 1/6W, J
R666	20512562	CF, 5.6K OHM, 1/6W, J
R667	20512103	CF, 10K OHM, 1/6W, J
R668	20512562	CF, 5.6K OHM, 1/6W, J
R669	20512562	CF, 5.6K OHM, 1/6W, J
R670	20512562	CF, 5.6K OHM, 1/6W, J
R671	20512562	CF, 5.6K OHM, 1/6W, J
R672	20512562	CF, 5.6K OHM, 1/6W, J
R673	20512562	CF, 5.6K OHM, 1/6W, J
R674	20512472	CF, 4.7K OHM, 1/6W, J
R675	20512224	CF, 220K OHM, 1/6W, J
R676	20512104	CF, 100K OHM, 1/6W, J
R677	20512103	CF, 10K OHM, 1/6W, J
R678	20512224	CF, 220K OHM, 1/6W, J
R679	20512223	CF, 22K OHM, 1/6W, J
R680	20512223	CF, 22K OHM, 1/6W, J
R681	20512224	CF, 220K OHM, 1/6W, J
R682	20512474	CF, 470K OHM, 1/6W, J
R683	20512332	CF, 3.3K OHM, 1/6W, J
R684	20512103	CF, 10K OHM, 1/6W, J
R685	20512224	CF, 220K OHM, 1/6W, J
R686	20512183	CF, 18K OHM, 1/6W, J
R687	20512102	CF, 1K OHM, 1/6W, J
R688	20512473	CF, 47K OHM, 1/6W, J
R689	20512223	CF, 22K OHM, 1/6W, J
R690	20512223	CF, 22K OHM, 1/6W, J
R691	20512102	CF, 1K OHM, 1/6W, J
R692	20512102	CF, 1K OHM, 1/6W, J
R693	20512102	CF, 1K OHM, 1/6W, J
R694	20512474	CF, 470K OHM, 1/6W, J
R695	20512474	CF, 470K OHM, 1/6W, J
R696	20512473	CF, 47K OHM, 1/6W, J
R697	20512103	CF, 10K OHM, 1/6W, J
R698	20512562	CF, 5.6K OHM, 1/6W, J
R699	20512223	CF, 22K OHM, 1/6W, J
R701	20512471	CF, 470 OHM, 1/6W, J
R702	20512123	CF, 12K OHM, 1/6W, J
R703	20521471	MF, 470 OHM, 1W, J
R704	20512224	CF, 220K OHM, 1/6W, J
R705	20512124	CF, 120K OHM, 1/6W, J
R706	20512221	CF, 220 OHM, 1/6W, J
R707	20512563	CF, 56K OHM, 1/6W, J
R708	20512272	CF, 2.7K OHM, 1/6W, J
R709	20512471	CF, 470 OHM, 1/6W, J
R710	20512102	CF, 1K OHM, 1/6W, J
R711	20512101	CF, 100 OHM, 1/6W, J
R713	20512332	CF, 3.3K OHM, 1/6W, J

Location No.	Part No.	Description
R714	20512332	CF, 3.3K OHM, 1/6W, J
R715	20512103	CF, 10K OHM, 1/6W, J
R716	20512103	CF, 10K OHM, 1/6W, J
R717	22657468	VARIABLE, 50K OHM, W
R718	22657468	VARIABLE, 50K OHM, W
R719	22657468	VARIABLE, 50K OHM, W
R720	22657468	VARIABLE, 50K OHM, W
R721	22657468	VARIABLE, 50K OHM, W
R722	20513106	CF, 10M OHM, 1/4W, J
R723	20512471	CF, 470 OHM, 1/6W, J
R724	20512471	CF, 470 OHM, 1/6W, J
R725	20512222	CF, 2.2K OHM, 1/6W, J
R726	20512222	CF, 2.2K OHM, 1/6W, J
R727	20512104	CF, 100K OHM, 1/6W, J
R728	20512104	CF, 100K OHM, 1/6W, J
R729	20512123	CF, 12K OHM, 1/6W, J
R730	20512123	CF, 12K OHM, 1/6W, J
R731	20512151	CF, 150 OHM, 1/6W, J
R732	20512221	CF, 220 OHM, 1/6W, J
R733	20512472	CF, 4.7K OHM, 1/6W, J
R734	20512105	CF, 1M OHM, 1/6W, J
R735	20512562	CF, 5.6K OHM, 1/6W, J
R736	20512224	CF, 220K OHM, 1/6W, J
R737	20512182	CF, 1.8K OHM, 1/6W, J
R738	20512223	CF, 22K OHM, 1/6W, J
R739	20512223	CF, 22K OHM, 1/6W, J
R740	22657467	VARIABLE, 200K OHM, W BALANCE
R741	20512472	CF, 4.7K OHM, 1/6W, J
R742	20512472	CF, 4.7K OHM, 1/6W, J
R743	20512221	CF, 220 OHM, 1/6W, J
R744	20512221	CF, 220 OHM, 1/6W, J
R745	20512124	CF, 120K OHM, 1/6W, J
R746	20512124	CF, 120K OHM, 1/6W, J
R747	20512823	CF, 82K OHM, 1/6W, J
R748	20512823	CF, 82K OHM, 1/6W, J
R749	20512333	CF, 33K OHM, 1/6W, J
R750	20512333	CF, 33K OHM, 1/6W, J
R751	20512393	CF, 39K OHM, 1/6W, J
R752	20512393	CF, 39K OHM, 1/6W, J
R753	20512154	CF, 150K OHM, 1/6W, J
R754	20512154	CF, 150K OHM, 1/6W, J
R755	20512821	CF, 820 OHM, 1/6W, J
R756	20512821	CF, 820 OHM, 1/6W, J
R757	20512821	CF, 820 OHM, 1/6W, J
R758	20512821	CF, 820 OHM, 1/6W, J
R759	20512391	CF, 390 OHM, 1/6W, J
R760	20512391	CF, 390 OHM, 1/6W, J
R761	20512391	CF, 390 OHM, 1/6W, J
R762	20512391	CF, 390 OHM, 1/6W, J
R763	20512391	CF, 390 OHM, 1/6W, J
R764	20512391	CF, 390 OHM, 1/6W, J
R765	20512101	CF, 100 OHM, 1/6W, J
R766	20512103	CF, 10K OHM, 1/6W, J
R767	20512104	CF, 100K OHM, 1/6W, J
R768	20512104	CF, 100K OHM, 1/6W, J
R769	20512104	CF, 100K OHM, 1/6W, J
R770	20512474	CF, 470K OHM, 1/6W, J
R771	20512473	CF, 47K OHM, 1/6W, J
R772	20512473	CF, 47K OHM, 1/6W, J
R774	20512154	CF, 150K OHM, 1/6W, J
R775	20512473	CF, 47K OHM, 1/6W, J
R776	20512103	CF, 10K OHM, 1/6W, J
R780	20512223	CF, 22K OHM, 1/6W, J
R801	20512102	CF, 1K OHM, 1/6W, J
R802	20512102	CF, 1K OHM, 1/6W, J
R803	20512563	CF, 56K OHM, 1/6W, J
R804	20512563	CF, 56K OHM, 1/6W, J
R805	20512391	CF, 390 OHM, 1/6W, J
R806	20512391	CF, 390 OHM, 1/6W, J
R807	20512563	CF, 56K OHM, 1/6W, J
R808	20512563	CF, 56K OHM, 1/6W, J
R809	20512332	CF, 3.3K OHM, 1/6W, J
R810	20512332	CF, 3.3K OHM, 1/6W, J
R811	20516332	CF, 3.3K OHM, 1/2W, J
R812	20516332	CF, 3.3K OHM, 1/2W, J
⚠ R813	20531101	FUSIBLE, 100 OHM, 1/4W, J
⚠ R814	20531101	FUSIBLE, 100 OHM, 1/4W, J
R815	20523100	OMF, 10 OHM, 1W, J
R816	20523100	OMF, 10 OHM, 1W, J
R817	22500186	WIRE WOUND, 0.22 OHM, 5W, K
R818	22500186	WIRE WOUND, 0.22 OHM, 5W, K
R819	20512221	CF, 220 OHM, 1/6W, J
R820	20512221	CF, 220 OHM, 1/6W, J
R821	20512473	CF, 47K OHM, 1/6W, J
R822	20512473	CF, 47K OHM, 1/6W, J
R823	20512152	CF, 1.5K OHM, 1/6W, J
R824	20512152	CF, 1.5K OHM, 1/6W, J
R825	20523391	OMF, 390 OHM, 1W, J
R826	20523391	OMF, 390 OHM, 1W, J
R827	20516102	CF, 1K OHM, 1/2W, J
R828	20523102	MF, 1K OHM, 1W, J
R829	20521562	MF, 5.6K OHM, 1W, J
R830	20512103	CF, 10K OHM, 1/6W, J
R831	20512154	CF, 150K OHM, 1/6W, J
R832	20512683	CF, 68K OHM, 1/6W, J
R833	20512104	CF, 100K OHM, 1/6W, J
R834	20523821	OMF, 820 OHM, 1W, J
R835	20512223	CF, 22K OHM, 1/6W, J
R836	20512223	CF, 22K OHM, 1/6W, J
R837	20512104	CF, 100K OHM, 1/6W, J
R838	20512333	CF, 33K OHM, 1/6W, J
R868	20512183	CF, 18K OHM, 1/6W, J
R901	20523332	MF, 3.3K OHM, 1W, J
R902	20523332	MF, 3.3K OHM, 1W, J
⚠ R903	20531229	FUSIBLE, 2.2 OHM, 1/4W, J
R904	20512391	CF, 390 OHM, 1/6W, J
R905	20512391	CF, 390 OHM, 1/6W, J
R906	20512560	CF, 56 OHM, 1/6W, J
⚠ R907	22500336	FUSIBLE, 0.47 OHM, 1/4W, J
R908	20516331	CF, 330 OHM, 1/2W, J

Location No.	Part No.	Description
R909	20512560	CF, 56 OHM, 1/6W, J
⚠ R910	20532220	FUSIBLE, 22 OHM, 1/2W, J
R911	20512391	CF, 390 OHM, 1/6W, J
R912	20512560	CF, 56 OHM, 1/6W, J
R914	20512102	CF, 1K OHM, 1/6W, J
R915	20512560	CF, 56 OHM, 1/6W, J
R917	20512102	CF, 1K OHM, 1/6W, J
R918	20512560	CF, 56 OHM, 1/6W, J
R919	20512471	CF, 470 OHM, 1/6W, J
R920	20512560	CF, 56 OHM, 1/6W, J
R921	20512569	CF, 5.6 OHM, 1/6W, J
R922	20512473	CF, 47K OHM, 1/6W, J
R923	20512124	CF, 120K OHM, 1/6W, J
R924	20512103	CF, 10K OHM, 1/6W, J
R925	20512102	CF, 1K OHM, 1/6W, J
R926	20516331	CF, 330 OHM, 1/2W, J

ACCESSORIES

AC01	22908520	OWNER"S MANUAL
AC02	22120144	REMOTE CONTROL UNIT RM-V347

Location No.	Part No.	Description

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105, JAPAN